TONS OF **TIPS** FOR YOUR MACHINE
see pages 16-25, 31-33, 44-45

Issue 147 • 31st August 1991 • 88p

NEW COMPUTER EXPRESS

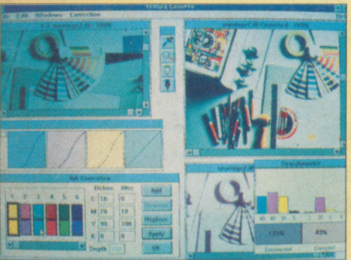
FIRST NEWS • FIRST REVIEWS • BEST BUYS • YOUR WEEKLY GUIDE

AMIGA

BLACK BOX!

Now your Amiga can run 70 times faster!

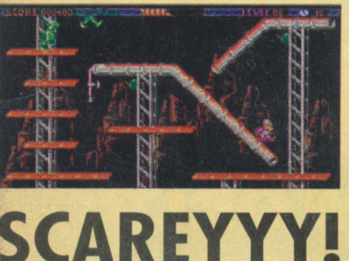
PC



MAC BASHER

Ventura Publisher for Windows is here!

GAMES



SCAREYYY!

It's*Monster Business* – but is it the biz?

VIRTUALITY!

VIRTUALITY
VIRTUALITY
4

The world's first cyberspace arcade hits London – pages 55&56

COVER DISKS!

Yep, they're coming! Turn to page 58 now!

BIG BLUE PRINTERS!

Is £440 for a dot matrix over the top? – p53

DPaint: learn the easy way with video – p49

35
9 770957 064028
Future PUBLISHING
Your guarantee of value

20 SEPT LEE GANS (17)

FROM THE MAKERS OF NEW COMPUTER EXPRESS...

Stylishly covers games, graphics, music, shareware – everything, in fact, other than the serioso business stuff

Combines the rigour and professionalism of *PC Plus* with the style and editorial philosophy of *Amiga Format*

PC FORMAT

September 1991 ▪ Issue Zero

The Modern Guide To Personal Leisure Computing

5.25-inch disks with this copy - also available with 3.5-inch disk

£3.25

Future Publishing

Your guarantee of value

WIN CD-ROM DRIVES WORTH WELL OVER £1,000

HOW TO JOIN THE SOUND REVOLUTION

Find out how a soundcard will transform your world

Q&A Get the most out of your PC with our section of essential hints, tips and tricks

Graphics

Discover a visually stunning new dimension to your PC

Get free software

The essential guide to public domain and shareware

Massive reviews

Definitive features on all the big games

THE PC FORMAT DISKS

ISSUE ONE

MiG-29 SUPER FULCRUM

Stunning playable demo of Domark's extraordinary new flight simulator.

PLUS...

...SPEEDBALL 2

Playable demo of the amazing action game from the Bitmap Brothers.

No Coverdisks?

Then ask for them from your newsagent. 2x5.25-inch disks with this copy.

The 50 best games EVER!

We name the games you won't want to miss

Discover the secrets of Monkey Island

Gasp! What have you done to me Threepwood?

I've simply followed the comprehensive guide in this very magazine, you grog-breathed ghoul!

Games, Graphics, Music, News, Reviews, Beginners' Guides, Comms, Competitions, Playing Guides, Public Domain and more – every issue

Writes about games in an adult but still exciting manner

Page after fact-packed page full of stunning reviews and authoritative advice solely dedicated to the full panoply of PC leisure activities

Program-packed cover disks: one 3.5-inch or two 5.25-inch, showcasing irresistible games and leisure demos from the leading publishers

Practical tutorials and reliable buyers' guides written by acknowledged PC experts

...YOUR GUIDE TO A NEW PC WORLD. AT A NEWSAGENT NEAR YOU FROM THURSDAY 26 SEPTEMBER

NEW COMPUTER EXPRESS CONTENTS

31 August 1991 • Express 147

COVER FEATURE

CYBERSPACE SENSATION!

Virtual Reality has arrived! And the first arcades are in London. *Express* takes a ride around the brave new whirl of tomorrow's technology – page 55

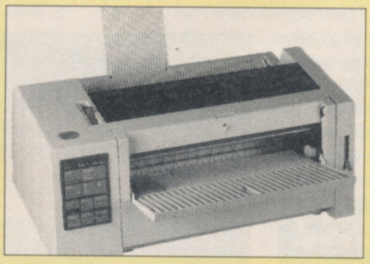
• The stylish new headware of the future - courtesy of Virtuality

REVIEWS

Sex, Lies and *DPaint*

Two new videos aim to teach you all you'll ever need to know about the Amiga's top paint package? But are they worth the readies? Find out on page 49

• If you want to learn how to use *DeluxePaint* what you need is a bit of video tuition



• IBM's new 2380; a 9-pin printer

Get Real! – A dot matrix printer for £440? Come on...

But it's from IBM isn't it. So are you paying for the most reliable printer ever or just forking out for the name? Make up your own mind on page 53

EVERY WEEK

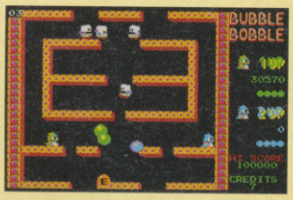
News: So hot, you might melt! Check out what's happening – pages 4–8

What's New

One of the most respected portables of the last five years gains a spell-checker and more...

Plus: Memory upgrades for Toshibas, *Ventura Publisher for Windows*, Hitachi CD-ROM drives and a bargain ST sampler all on page 10

• New product for the Z88? Yes!



• Scary monsters and super creeps! But Stuart Campbell ain't one of 'em!

Games Week

The most happening, frantic games news, previews, reviews, tips and charts this side of Pluto! – pages 50 & 51

SHOPPING EXPRESS

Letters 13
Amiga 16
ST 17
PC 19
Spectrum 20
C64 21
CPC 23
Mac 24
Whole Wired World 28
Programming 30
TechTips 32
On-line 42
PD Column 44
Event Horizon 46

YOUR MACHINE

AMIGA

Get into the World of Commodore for free.........4

CSA's 68040 board for the A1500 announced...........4

Innovatronics ***Canvas*** – cartoon software.............5

High street CDTV centres are announced................5

Is the Amiga taking the back seat with Commodore concentrating on CDTV?..16

ST

They're back! ***Super Space Invaders*** hits the screen............................4

A new accounting program is all yours on..................6

Dr.T releases even more sequencing software.........7

Sam Tramiel reveals some hot new products in an informal interview...........17

PC

Lotus 1-2-3 for *Windows* all set to roll....................5

Genoa release a low-cost VGA card......................7

Leather Goddesses of Phobos 2 for free..........8

What does the future hold for DOS? 19

MACINTOSH

Microsoft hit back at Apple's claim that the Mac Front End is an original...24

C64

A brand new floppy drive is now available......................6

Renegade 3 wraps up the trilogy in fine style and a user group for ***Geos*** lovers.....21

SPECTRUM

Domark's ***Freescape*** compilation offers up at least one new game.......23

CPC

Create a new world with ***3-D Construction Kit***............23

CONSOLES

Roy of the Rovers shoots his way onto the Megadrive........4

Sega signs up with Falcom to produce CD games..............8

• Roy Race, player/manager of Melchester Rovers, which finished third from the top of the first division last year, will be looking to a new deal to help them lift the trophy this season

It's all Rover

What with the imminent arrival of the soccer Super-league and its inevitable mass television coverage, sponsorship is becoming more and more lucrative.

However, all the giants, Arsenal, Liverpool, Manchester United, and some might say, Aston Villa, are tied up. All of them that is except for Melchester Rovers, home of Roy Race, or Roy of the Rovers.

Sega Europe, which has recently transferred from Virgin Mastertronic for a hefty fee, has snapped up the half chance to sign Melchester and its golden boy for the 1991/92 season.

This means that the name Sega will adorn the familiar red and yellow livery of Melchester Rovers.

Commenting on the deal, Roy Race said: "It's a perfect partnership - together Melchester and Sega will always be top of the league!" ■

Board walking

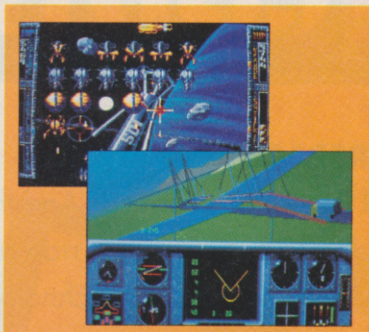
CSA has launched a new 68040 accelerator board for the Amiga 1500.

The board, called the 040 Magnum comes with a SCISI interface and serial and parallel ports linked to the 68040 bus. The Magnum has 1Mb of shadow RAM, Kickstart 2.0 with 040 mode, 512k of customisation programs and 4MB of 32-bit RAM. The 32-bit RAM can be expanded to 64Mb.

The board fits into the processor slot of the 1500 and a hardware switch toggles between the standard 68000 or new 68040 processing regimes.

For more information call the UK and European distributors, Bytes and Pieces on 0253 795376. ■

Oh no, it's them again...



• If the Space Invaders don't get you, then the Russian Airforce might with its MiG-29s. Both feature in new games from Domark. You've been warned!

They're finally here: the Space Invaders, those little critters which changed the face of pubs from 1979 onwards, have returned.

Super Space Invaders comes from Domark. The alien devils have been disinterred and reanimated to feature some fab, updated mass destruction.

Although the format is vaguely the same – towers, attackers, frustration, and just one more go – the look is radically different. And even features what Domark calls 'wacky bovine bonus levels' which we can only think means that you get to obliterate the cow that jumped over the moon.

Super Space Invaders is out now. For the Amiga, ST and PC you pay £24.99. The Spectrum version costs £9.99, while the CPC disc will set you back £17.99. The CPC cassette is £10.99, the C64 disk is £14.99 and the cassette is £10.99.

Along with this launch comes the eagerly awaited follow-up to the MiG-29 flight sim. Called *MiG-29 SuperFulcrum* the new game does away with many of the outdated analogue features which are replaced by CRT video display.

For a more in-depth review of both games hang fire for *Express* gamer Stuart Campbell's review in a forthcoming issue.

SuperFulcrum costs £44.99 for the PC, and £39.99 for the ST and Amiga. ■

November World of Commodore Show at Earls Court II

SHOWING OFF

The fifth annual World of Commodore Show is to be held at Earls Court II between 15 and 17 November this year.

The expected 35,000 plus visitors will be able to view new and previewed products for the Amiga, CDTV, C64 and Commodore PC ranges. There will also be a creche, a Multimedia Theatre demonstrating the latest in hardware and software for the Amiga and CDTV, a Games Arcade, and there's even a pre-Christmas Shopping Mall.

The move to Earls Court II, with its 9,600 square metres of exhibition space, is a change from the previous venue, the Novotel in Hammersmith. Earls Court II also offers excellent access for disabled users.

There is also a new sponsor with *Express'* sister magazine, *Amiga Format* taking on that role.

The show is pitched at both the leisure and serious ends of computing with Commodore's range of machines. It is expected that many developers will be previewing new products, and even launching hardware and software for the Amiga and CDTV.

Exhibitors will include Pysgnosis, who's managing director Jonathan Ellis comments: "The World of Commodore is the perfect event to preview our products", and Electronic Arts, which will be launching *DeluxePaint IV*, and showing *Populous II, The Power Monger*, and *Birds of Prey*. Also attending will be MicroProse, Virgin Games, and Ocean. The only notable non-attendees at the show will be US Gold.

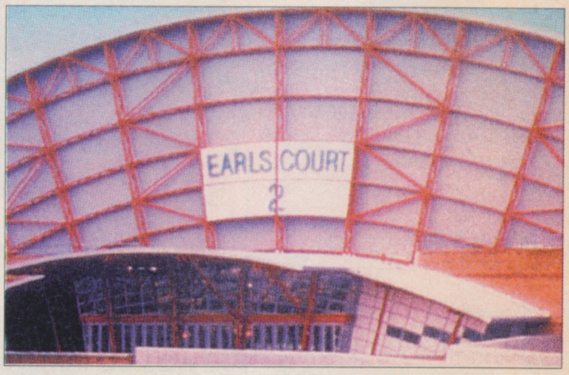
Doors open to the public from 9am to 5.30pm on the 15th and 16th, and 9am to 4pm on the 17th.

Tickets are £4.95 for adults and £2.95 for under 14s if booked in advance.

Ring the ticket hotline on 051-356 5085. ■

EXPRESS OFFER

As an exclusive offer to readers of *New Computer Express*, the first 50 readers who turn up at the show clutching a current issue of *Express* are entitled to free (yes, free!) entry.



• Earls Court II – it's big and new. And it's the venue for this year's World of Commodore Show. Since almost every piece of Commodore software and hardware on the entire planet will be present, the show should provide the perfect opportunity for a spot of Christmas computer shopping.

Draw pardners

Corel Systems has announced a $1million competition called the World Design Contest.

Starting on 1 September and running until 30 April 1992, the contest is aimed at unearthing the best in PC graphics within nine categories:

- Desktop publishing and presentation
- Logos
- Technical drawing
- People/plants/animals
- Landmarks/Travel
- Business/Technoloy/Transportation
- Holidays/Thematic Event/Sport
- Photos/Bitmap applications
- Miscellaneous

Winners are drawn every month, and stand to win a Corel CD-ROM package including a CD-ROM drive, CorelDrive PC interface kit and *CorelDraw* itself.

By merely entering the competition you will receive a CD-ROM of last year's entrants, free mug, mouse pad, and keyring.

The winners of the monthly draws are automatically put forward to the CorelDraw World Design Contest in May 1992.

The eventual winners in each of these nine categories stand to win a 486-based system featuring colour VGA monitor, laser printer, Seagate hard drive, and Hewlett Packard scanners in the Grand Final to be held in Canada.

For more information call Corel 0101-613 728 8200 extention 1609 or fax 0101-613 728 2891. ■

COREL DRAW!
corel

•You and your PC could be heading for transatlantic stardom before the end of next year if you think graphically

Commodore to open 12 centres for CDTV in three years

MARKET TAKES UP MULTIMEDIA

Commodore is to take a leaf out of Apple's book by opening 12 'Multimedia Centres' over the next three years to push its Dynamic Total Vision (CDTV) system.

The centres will contain CDTV and Amiga-related products and nothing else. This is in a similar vein to Apple Computer's centres which are aimed at creating an exclusivity to the Apple name.

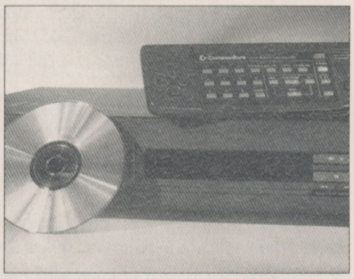
The Multimedia Centres will be set up to cater for the needs, not only of the home Amiga and CDTV user, but also of the professional who wishes to make the most of the latest upsurge in multimedia development.

However, Commodore, which claims that some 5,000 CDTVs have already been sold in the UK alone, will not be staffing the centres. Franchise deals with independent dealers are in the pipeline.

The concept of multimedia is the keystone of this latest endeavour. At the moment this remains a buzz-word rather than an understood term to many computer users. The aim is to familarise the public and dealers with the basic ideas of the multimedia concept through hands-on experience.

Terry Cooke, Commodore's national director of business machines, under whose sector the new centres will fall, said: "We realise that multimedia is not about single technology but applying solutions to needs. And that's what training achieves".

To this end, training courses for the centre staff have been organised. These courses are expected to be extended to other interested parties. Training will either be carried out at a specialist facility in Milton Keynes or at local centres depending on demand. ■



• Can't find a CDTV for love nor money? Over the next three years this problem could be solved with the emergence of Commodore Multimedia Centres

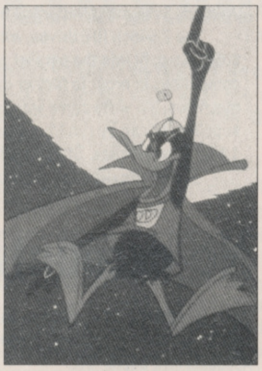
Cartoon canvasses

Ex-Warner Brothers animateur Ryan Roberts has contributed to a new selection of on-screen pictures and animation from Innovatronics for the Amiga.

The collection is the first in a continuing series and is called Canvas. It features five full screen pictures and 13 animations of animals and fantasy characters.

Ryan has also produced the Lunar Construction Kit. Unlike Canvas, this selection allows the user to manipulate the images in order to make space scenes. Along with the 183 pieces of clip art, 24 pictures and 10 animations, there are help files and examples.

No UK prices have been set as yet. For more information contact the UK distributors of Innovatronics products, Checkmate Digital on 071-923 0658. ■



• On-screen pictures and animation from Innovatronics will soon be available in the UK. This should make Amiga -owning cartoon fans go over the moon

Sound as a pound

GVP has released two new pieces of hardware for the Amiga - a new stereo sound sampler and a 24-bit colour board.

The Digital Sound Studio runs on all Amiga's and comes replete with all the standard sampling functions you could desire.

The Impact Vision 24 board provides more than 16 million colours and is complete with flicker fixer, frame buffer and even a genlock. However, it is aimed at the higher echelons of the Amiga range, the A2000 and A3000.

Currently there is no UK price set for either product. However, Silica Systems has recently gained distribution for GVP products so this situation should soon be rectified. For more information call Silica on 081-309 1111.

SHOOT FROM THE LIP

"Now being honest, there are a lot of (software) *titles you can't even get for the ST"*

Commodore UK's managing director talking about the rise and rise of the Amiga. (Source: ***Computer Trade Weekly*****)**

"We've sold 5,000 CDTV's in the UK so far, that's just about what we expected. It isn't going to a product that suddenly explodes."

As above.

"Honestly, on this one [CDTV] *I'd rather not be Commodore. I wouldn't like to be Commodore fighting against Sony, Philips, Matsushita, JVC, you know, everybody. It will not be a pretty fight at all. So I like to watch from the sidelines at the moment, just supporting CD-ROM and CD-I, I'd rather be in that camp. To be by myself with CDTV, I would not be a happy camper."*

Sam Tramiel of Atari talking to ***Express*** **columnist Andy Hutchinson.**

"Everywhere you look these days you'll find Gateway 2000 computers."

Advert for said computers. Can anyone vouch for this?

Bully for school

School is imminently in and to coincide with this, The Data Business has launched a software system aimed at stopping software piracy in educational establishments.

Ssince many schoolkids are familiar with copy protectionon games, then what better way to thwart them than by using the same ones.

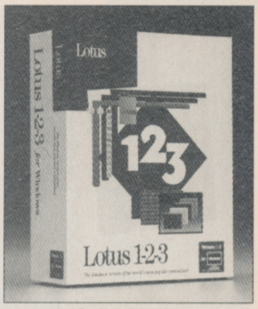
The product is called *Zipitup/Scholar* and is based on a system used by software publishers to prevent piracy, so the company claims.

Ziptiup is targetted at MS-DOS-based software and works by locking .EXE and .COM files.

Basically a user cannot access these files unless certain key information is at hand. The program copies the program files onto specially formatted disks which contain invisible areas within which the keys are stored.

According to the company, the encryption and distribution of data on the key disks makes interference or duplication of the disk 'impossible'.

Price is £99.95. For more information call The Data Business on 0865 842224. ■



• Voted the best *Windows* compatible product by *Byte* magazine, Lotus *1-2-3* for *Windows* is for sale from 6 September

1-2-3 to go

Lotus ***1-2-3*** **for** ***Windows*** **will be launched in the UK on 6 September. Lotus for** ***Windows*** **had already been voted the best** ***Windows*** **compatible product by** ***Byte*** **magazine at Spring Comdex.**

According to Lotus president Jim Manzi: "Early customer response to *1-2-3* for *Windows* has been extremely enthusiastic.

"There's strong pent-up demand," he continued in classic Americo-sales jargonese.

To run the software you will require a 286 PC or upward, *Windows* compatible displays, mouse, 2Mb of RAM, 5Mb of hard disk space, *Windows 3* or upwards and DOS 3 or higher.

Price is £475. Upgrades from standard DOS systems bought between 14 February and 30 September cost £35.

For more information call 0784 455 445. ■

Thinking for the disabled

A new product aimed at disabled Amiga users has been launched by Think Limited.

Think is the company behind Alfred Robotic Arm (see *Express* 136). The new product is Toucan Learning Tray. It is a board which enables users, especially severely disabled people, to operate standard Amiga programs via switching devices. The board, and accompanying software costs £750.

Contact Think Limited on 021-384 4168 for details. ■

EXPRESS...

A game called ***Crisis in the Kremlin*** **is due for release in the States soon. You play the president of Russia and have to avoid the politcal pitfalls which could lead to your erstwhile colleagues issuing a bulletin about your 'ill health'!**

...SNIPPET

Blue moans

In a move which has caused uproar within the ranks of British industry, the Ministry of Defence has awarded IBM and the Westland Group a contract to supply the Royal Navy with new Merlin helicopters.

It has been reported in *The Sunday Times* that defence secretary Tom King agreed the deal despite entreaties from the chief executive of British Aerospace (BA) to keep the contract wholly British.

BA was a partner in another consortium which included General Electric Plc, and which bid for the deal.

Apparently the GEC/BA group even went as far as to lower its tender for the EH101 Merlins to match the IBM/Westland offer in order to keep the deal wholly British.

So far not even the mighty Reuters news agency has managed to extract a comment from Big Blue or the defence ministry. ■

Drop 'em!

Sega Europe, the company which was once Virgin Mastertronic is apparently dropping the price of the 16-bit Sega Mega Drive console.

Further details will be featured in these news pages next week. ■

EXPRESS...

The Royal Society for the Protection of Birds is suing a Unisys reseller called Ampersand for £1million over a membership system which was allegedly delivered late and contained corrupt data.

...SNIPPET

A Jewel in the PCW's Crown

PCW owners can now have instant access to thousands of files thanks to a new hard disk from Cirtech.

Gem is a simple to connect hard drive with an access time of 27 milliseconds. It can also be used to automatically boot up CP/M and *Locoscript*, avoiding all that messing around with floppy disks.

Coming in two configurations, 20Mb and 40Mb, Gem can store up to 2,048 files in its directory. It comes with its own special adaptor, and has a parallel printer interface option for PCW owners with additional printers.

Prices are £230 and £345 depending on capacity, while the parallel port option is an extra £22. Contact Cirtech on 0835 23898. ■

DJW Microsystems maintains new UK-made graphics add-on pr

AMIGA'S BLAC

A British company called DJW Microsystems is claiming that its soon-to-be released Black Box graphics system is "set to be the most exciting development in the history of the Amiga since the Amiga itself".

The Black Box makes use of true 32-bit technology in the form of a 32-bit Motorola 68040 processor, which the company claims can run at 33MHz in order to provide graphics capabilites up to 70 times faster than standard 68000 Amigas.

Unlike existing graphics systems, which attempt push the data from a 32-bit processor through the Amiga's standard 6800 16-bit expansion systen, the Black Box maps its graphics memory directly to its built-in 68040 chip.

VIDEO FASTIES

In effect, a 3Mhz 68040 processor running at full clip enables a Black Box equipped Amiga to take images, including video images, from any piece of software. The company even goes as far as to claim that images from Workbench can be captured and manipulated.

At a cost of £3,000 however, the equipment is not aimed at the home user for the present. Although a full 16million colours are available to the user, these can be limited for use with desktop publishing (DTP) or computer aided design (CAD). This also enables the system to cut the amount of processor-intensive labour required, consequently speeding up the work handling. (For more information on the technical specifications see the box accompanying this piece.)

Although the Black Box is still in the development stages, the proposed specifications are quite breathtaking. Several other hardware developments are also in the pipeline to complement the system. These include high speed RAM, multiple graphic processor boards (GPBs), realtime 24-bit video digitisers, four input realtime 24-bit video digitiser/mixer/manipulator, and a video Postscript GraphicsROM.

• The Amiga, which can do no wrong, looks as if it will be gaining some high-end graphics power in the first quarter of 1992

Until the Black Box sees the light of day, the claims made for it by its creators might seem to be over enthusiastic. However, even with producers such as the American Great Valley Products (GVP) gaining distribution in the UK for its wide range of Amiga hardware, genlocks proliferating at a vast rate of knots, and new products emerging for the machine which apparently can do no wrong, the Black Box is impressively specified.

Finally, in a statement to the trade press, Commdore UK's managing director, Steve Franklin, has made it clear that his company are aware of the growing third party hardware support for the Amiga by suggesting that the the 1Mb Amiga could be here to stay as standard.

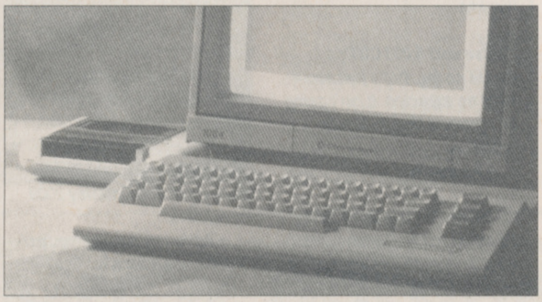
For more information call DJW Microsystems on 0743 244752. ■

Six seconds for the C64

TIB has launched a slim 3.5-inch drive compatible with all C64 machines.

Though it will load a 64K game in just six seconds, with a planned price tag of around £90 it is primarily aimed at programmers.

It fits into the cartridge port and takes power from the C64 itself, so no powerpack is needed, and stores up to 720K of information. It comes bundled with a games compilation on disk. ■



• The humble Commodore is brought up to date with the addition of a speedy 3.5-inch diskdrive

The harder they come

Julilitech Systems is importing new hard drives from the USA.

The 2.5-inch IDE drives, which come in 20Mb, 40Mb, 60Mb and 80Mb sizes, fit into the parallel printer port of any IBM or compatible. In order to further extend their use with portable machines, the units come with built-in auto sensing power supplies, or can be run from standard batteries. The drives measure 1.5 by 5 by 5-inches. Starting price is from £295.

For information call Julitech Systems on 081-965 9494. ■

No accounting for taste

Digita is releasing an upgrade to its popular accounting package, *Home Accounts* on 2 September.

Home Accounts 2, for the Atari ST, STE, Mega and TT, features Digita's new Human Interface Protocol system, which, the company claims, makes it a much more intuitive and friendly program to use. Human Interface Protocol has previously been used with Digita's *Wordworth*, and met with favourable reviews. The new upgrade also includes extra items such as Screen saver, 106 printer drivers and a printer spooler.

It comes with a glossy 220 page manual and has a price tag of £54.99. Contact Digita on 0395 270273. ■

Super graphics

Genoa has launched a series of three high powered SuperVGA cards for use in graphics-intensive environments such as Windows and Computer Aided Design (CAD).

The 7000 series offers resolutions up to 1024x786 and features Genoa's safescan technology which enables computer displays to be overscanned in a similar way to TV screens.

The 7800 (£159) has 1Mb of RAM, the 7400 (199) with 512Kb of RAM upgradable to 1Mb, and the 7860 (£239) which features Sierra Semiconductor's Hi-Colour DAC which supports the 32,768 colour 5-5-5 TARGA format at up to 800x600 resolution. This provides for anti-aliasing to smooth out jagged edges, and a continuity of colour across the screen in Graphical User Interfaces no matter how many windows you open.

Contact Genoa Systems on 0932 33737. ■

• Just what is the point of sticking with CGA when you could go up a level?

Fib ahoy!

American on-line system, Compuserve, has had to admit that an article it carried concerning foreign travel called Adrift in the Amazon by Pat Pugh was a fabrication The ship which was supposed to have made the journey had not even been fully built at the time the writer claims she was on it.

Compuserve said that it normally trusts the veracity of its travel writers. ■

on provides true 32-bit technology 68040 power at 33Mhz

CK MAGIC BOX

INSIDE THE BLACK BOX: THE SPECIFICATIONS

The DJW Microsystems Black Box system, which is currently under development, is undoubtedly impressive. The technical specifications are as follows:

- 16million colours
- Third generation 32-bit Motorola 68040
- Fully memory-mapped graphic system
- Burst transfer from 68040 into graphics RAM at 40million bytes per second
- 1Mb of 32-bit Wide RAM expandable to 32Mb on board RAM
- 32Mhz Texas 34020 32-bit Graphics System Processor (GSP)
- Standalone video and scratchpad RAM
- 3-D graphics handling
- Potential Gb (2,147,483,648 bytes) of RAM via the on-board expansion connector
- The GSP consists of a 32Mhz Texas 34082 32-bit Reduced Instruction Set Computing (RISC) graphics floating point and Graphics Extrusion co-processor.
- 10million instructions per second (MIPS) integer arithmetic
- Three operand pixel blittering (source A, source B and destination) at up to 142 million bits per second
- 40 MIPS floating point arithmetic
- Colour and pattern fill at up to 1.34 billion bits per second
- Maximum resolution 8000x4000 (theoretical as no monitor in existence can cope with this)
- Maximum resolution (practical) 1260x832
- 25-pin video connector
- Digital and analogue alpha channel information handling
- On-board expansion connector
- On-board genlocking facilities

Leap prog

If you want to become an Amiga programmer then Kuma has released a book which should help you learn a few tricks of the trade.

Programme Design Techniques For The Amiga is aimed at both the beginner and the relative expert who thinks his style could do with a bit of tightening.

It contains 400 pages of information and tips covering the BASIC, AINSI C and 68K Assembly languages.

Subjects include moving from design to real code, secrets of structured programming, hints on writing portable code and tricks using the Amiga's co-processor.

Written by Paul Overaa, a professional programmer with 20 years experience, the book costs £16.95. For more details phone Kuma on 0734 844335. ■

EXPRESS...

Commodore is to spend £3million on advertising for the C64, Amiga and CDTV. The split is as follows, £2million on the Amiga, £750,000 on the CDTV, and between £250-£500,000 on the C64. The Amiga will be on TV, as will CDTV. The C64 won't.

...SNIPPET

Crossing boundaries

Before the end of the year 2000 we could all be looking back at programs which would only run on one type of machine and laughing in derision. That is if Motorola's latest venture comes to fruition.

The massive American company has designed, and sold, what it calls a Dynamic Dataflow computer. The machine is named the Monsoon and is theoretically capable of running thousands of programs which previously would have been processor specific. Not only that, but it is further claimed that it can improve performance.

Monsoon consists of eight 64-bit processors, and eight 32-million byte memory elements each of which can process up to ten million data-flow 'tokens' per second. It's front end comprises four UNIX Delta series computers.

At the heart of Monsoon, which was jointly designed by the Massachusetts Institute of Technology and Motorola, lies a programming language called Id. This is based on techniques of parallel processing and is claimed to be a breakthrough in this area by both MIT and Motorola.

Of course, the project was not cheap, the $10million funding for the machine came from the United States military in the form of the Defense Advanced Research Projects Agencies (DARPA). However, commerical viability is a major underlying factor in the development of such a machine and it is expected that MIT and IBM researchers are already working on a version of Monsoon for the individual or small business user which could see the light of day before the end of the present century. ■

AST and you will

Two new PCs have been added to AST Computers range of business machines. These are the Premium II 386/33 and the Premium II 486/33.

The former runs at 33Mhz and comes with 4Mb of RAM as standard. The central processing unit features an adapted version of the Intel Smart Cache previously used with 486 PCs and now modified for use with 386DX technology and includes 16k of high speed cache memory. It is also capable of taking an Intel 387DX or Weitek 3167 math co-processor.

The Premium 486/33 makes use of an ASIC (Application Specific Integrated Circuits) architecture which theoretically uses less power and remains cooler. It also comes with 4Mb of RAM expandable to 16Mb on the CPU board, or a maximum of 80Mb of main RAM. It supports super VGA and comes with four expansion ports – two serial, one parallel, and a PS/2 compatible mouse port. Both come with an IDE hard drive interface.

Entry level price for the 386 model is £2,295 for a single 3.5-inch floppy drive version. The 486 price starts at £3,595. For more information call AST on 081-568 4350. ■

• It might not be time to bin your old 286 just yet but a look at the new ASTs might change your mind

To a DR T

Dr T, the company responsible for such products as Dr T's *Music Studio* has launched some new software for the Amiga.

X-OR is a patch editor cum librarian well known to PC and ST users. The program enables users to bypass the finicky and limited editing facilities available on most synthesisers and make use of their Amiga instead.

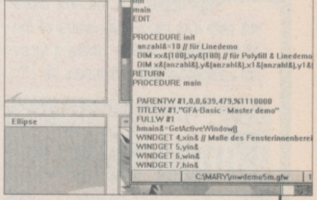
Users can also copy patches from one synth bank to another as well as playing MIDI files during the editing process.

Dr T's products are now being handled in the UK by Zone Distribution. And in order to back this up, Zone has introduced a technical helpline for Dr T users.

It is not stopping there however; soon to hit the streets will be an upgrade to the KCS sequencing package including the ability to play IFF format samples, 48 track sequencing, realtime graphic editing, 16 stave transcription and a redesigned frontend.

X-OR costs £219. KCS 3.5 is £279. For more information call Zone on 081-766 6564. The Dr T helpline is 081-699 8074. ■

Windows in action



```
// Demo Nr. 5 [Master-Demo] //
// (C) 6.91 M.Wildenauer   //
// für Version 16.5.91     //

init
main
EDIT

PROCEDURE init
  anzahl&=10 // für Linedemo
  DIM xx&(100),xy&(100) // für Polyfill & Linedemo
  DIM x&(anzahl&),y&(anzahl&),x1&(anzahl&),y1&(
RETURN
PROCEDURE main

  PARENTW #1,0,0,639,479,%1110000
  TITLEW #1,"GFA-Basic - Master demo"
  FULLW #1
  hmain&=GetActiveWindow()
  WINDGET 4,xin& // Maße des Fensterinnenberei
  WINDGET 5,yin&
  WINDGET 6,win&
  WINDGET 7,hin&
```

• Windows: yet again the PC does battle with the Mac, this time the field is all medias

Action! is the name of the latest multimedia package aimed at users of Microsoft's Windows graphic user interface (GUI).

It comes from the United States via two merged companies: Macromind and Paracomp – the former made its reputation in the Apple Macintosh market.

The bundle is said to enable users to incorporate text, graphics, sound, animation and video images. Also included is a Clip Media library which contains sounds, stills and animated graphics. It is launched in the USA next month at a cost of $495. No UK distribution has yet been agreed.

For more information call 010-415 442 0200. ■

Programming mistake almost kills 500 people in mid-air

ERROR REVEALS SYSTEMS FAULT

A British Airways Tristar narrowly avoided four mid-air collisions owing to what has been alleged to be a gross programming error on the plane's flight navigation computer.

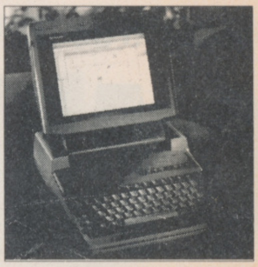
The Tristar, on course for Stansted from Montreal with nearly 300 people on board, was 120 miles off course when it came to within a minute of crashing into a Richair DC-8 carrying 200 British tourists back from Florida.

According to a report released last week by the Transportation Safety Board of Canada, the Tristar swung south, across the flight path of three other planes including an Aer Lingus Boeing 747.

The report reveals that the incident was because of a series of programming errors which took place before the plane even took off on 9 July, 1989. The first officer fed in a course bearing of 53 degrees north latitude instead of 55 degrees. He later realized his mistake, but the changes he made were still incorrect.

The pilot claims he did not check the co-ordinates because he was concentrating on flying in rough weather. The cabin crew deny that they had only had eight hours sleep in the previous 43 hours. The captain was stripped of his rank for a year.

The report concluded, however, that the Captain's error was exacerbated by a systems failure at British Airways to ensure that enough checks were made and subsequently double checks were introduced on all BA Tristars. ■



• The Sharp PC-8501 colour laptop is now 25 per cent cheaper

Sharp colour

Sharp has cut 25 per cent off its colour laptop, the PC-8501.

Now priced at £5,995, down from £7,995, the PC-8501 (as reviewed in *Express* 124) features a backlit LCD screen based on Thin Film Technology (TFT) to achieve a very high quality colour display.

Sharp has just opened a new TFT LCD plant in Tenri, Japan, to produce 9-, 10- and 12-inch colour screen for both its own use and for other major producers. ■

Sega in joint CD venture

Sega is teaming up with leading Japanese software house Falcom to form a new company dedicated to developing CD-based games for Sega's range of consoles.

Sega and Falcom have together invested $222,000 into the new company, which will be called Sega Falcom. Sega will own 55 per cent of the company.

Sega Falcom will produce both CD-based versions of existing Sega games as well as developing all new games.

Sega hopes that the new move will help it to recover its share of the 16-bit console market, where it faces hot competition from Nintendo. ■

SEGA
GENESIS
16-BIT

• Two heads are better than one – the Sega Falcom venture will produce Sega games and develop new ones to fend off competition from Nintento

Stay or pay

Staff at Australian computer firm Datamatic may find that if they want to leave the company within the first year following their training they will be asked to pay back their training costs.

The company is pursuing plans to bond new employees to a 12 month contract. The move is intended to stop other companies poaching trained staff.

The training program costs the company around $11,000 and includes a trip to America. Managing director Brian Killen believes that the scheme could be up and running within three months and claims that initial reaction from staff has been favourable. ■

AT&T and NCR

Following a summer of merger madness in the computer industry, two of America's leading telecommunications and computer companies are preparing to join forces.

NCR has called a special meeting of shareholders on 13 September to vote on a proposed $7,400 million merger with AT&T which will mean that each share of NCR stock will be converted into AT&T common stock according to an agreed exchange ratio.

The ratio will be determined by the average closing price of AT&T stock between 9 August and 6 September. The ratio is expected to be around 2.986 AT&T shares per NCR share.

NCR is posting mail proxy voting forms at the moment. The companies hope to have completed the merger by the end of September. ■

PC sound enhanced for free

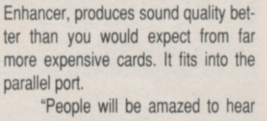
Activision is giving away a free PC sound enhancer with every copy of *Leather Goddesses of Phobos 2*.

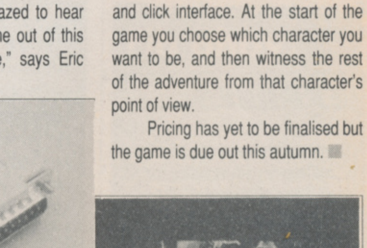
The company reckons the device, the Activision Life Size Sound Enhancer, produces sound quality better than you would expect from far more expensive cards. It fits into the parallel port.

"People will be amazed to hear the sound which will come out of this small piece of hardware," says Eric Lux, Activision Europe product and development manager.

Consequently, the game will feature copious sound effects and digitised music. Based in a 50s American town which has been invaded by an alien, the game is a 'multimedia adventure' with hundreds of animated scenes and using a point and click interface. At the start of the game you choose which character you want to be, and then witness the rest of the adventure from that character's point of view.

Pricing has yet to be finalised but the game is due out this autumn. ■





• Aliens invade small-town 50s America in *Leather Goddesses of Phobos 2*

Bingo census

Australia is following Britain's example by feeding the results of its latest census directly into a computer database using optical mark readers (OMRs).

This process was used for the recent UK census, and Australian officials believe the OMR system will save the country A$5 million (around £2.5 million).

It should also produce results in just six months, half the time the manual system would take.

One problem has been that unlike Britons, Australians are not used to filling in computer-read forms, so the design of the census forms has been based on a format used for a popular local lotto game.

Once the data has been read by the OMRs it will be stored on Targon Unix computers, then transferred to the Australians Bureau of Statistics' Fujitsu mainframe in Canberra. ■

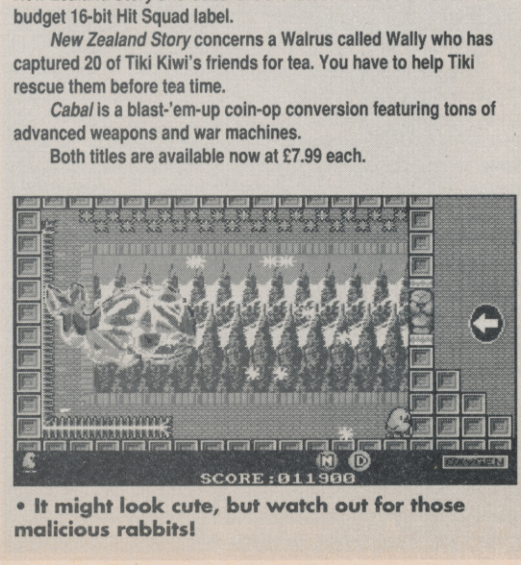
Kiwis and conversions

***New Zealand Story* and *Cabal* are the latest releases on Ocean's budget 16-bit Hit Squad label.**

***New Zealand Story* concerns a Walrus called Wally who has captured 20 of Tiki Kiwi's friends for tea. You have to help Tiki rescue them before tea time.**

***Cabal* is a blast-'em-up coin-op conversion featuring tons of advanced weapons and war machines.**

Both titles are available now at £7.99 each.



• It might look cute, but watch out for those malicious rabbits!

CITIZEN PRINTERS

Silica presents some great offers on the award winning range of high quality dot matrix printers from Citizen. Each Citizen printer is built in the UK to exacting standards, ensuring superb reliability and a very high quality of output. Our confidence in the quality of Citizen printers is such that we are pleased to offer a unique two year guarantee with every printer. Plus, if you purchase your Citizen printer from us, we will give you a Silica Printer Starter Kit (worth £29.95), *FREE OF CHARGE!*

FREE DELIVERY
Next Day - Anywhere in the UK mainland

FREE STARTER KIT
Worth £29.95 - With every Citizen printer from Silica.

FREE COLOUR KIT
Worth £39.95 - With Swift 9 and Swift 24 printers.

2 YEAR WARRANTY
Silica offer a 2 year warranty (including the printer head) with every Citizen printer purchased from Silica.

WINDOWS 3.0
Free Windows 3.0 driver - In the Silica Starter Kit.

FREE HELPLINE
Technical support helpline open during office hours.

MADE IN THE UK
Citizen printers are manufactured to high standards.

144 CPS DRAFT 9 PIN

CITIZEN 120D+

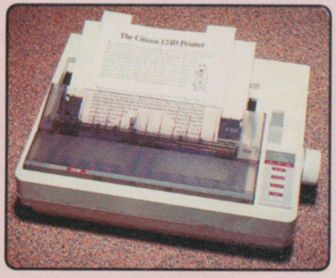
The Citizen 120D+ is one of the UK's best selling printers. It has a stylish appearance and excellent features and performance for such an inexpensive printer. The 120D+ is available with either a serial or parallel interface and is an ideal first printer.

- *9-pin Printhead*
- *Print Speed 144cps Draft*
- *30cps NLQ*
- *Epson & IBM Graphics Emulation*
- *Pull Tractor & Bottom Feed*
- *Superior Graphics - 240×216dpi*
- *FREE Starter Kit*

RRP	£233.83
STARTER KIT	£29.95
TOTAL RRP:	£263.78
SAVING:	£112.20
SILICA PRICE:	£151.58

£129
+VAT = £151.58

144 CPS DRAFT 24 PIN



CITIZEN 124D

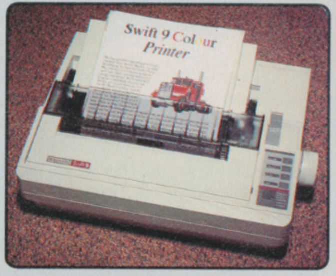
The award winning Citizen 124D brings high quality 24-pin dot matrix printing within every computer users reach. It is the ideal choice where high quality printing is required at a budget price.

- *24-pin Impact Printer*
- *Print Speed 144cps Draft*
- *2 LQ Fonts (48cps)*
- *8K Buffer*
- *Epson, IBM & NEC P6+ Emulation*
- *Advanced Paper Parking*
- *Superior Graphics - 360×360dpi*
- *FREE Starter Kit*

RRP	£292.58
STARTER KIT	£29.95
TOTAL RRP:	£322.53
SAVING:	£112.20
SILICA PRICE:	£210.33

£179
+VAT = £210.33

192 CPS DRAFT 9 PIN



SWIFT 9 - COLOUR!

The Citizen Swift 9 is perfect for those who require high quality dot matrix black or colour printing at a budget price. The print quality of Swift 9 rivals that of other manufacturer's 24-pin models.

- *9-pin Impact Printer*
- *Print Speed 192cps Draft*
- *3 NLQ Fonts (48cps)*
- *8K Buffer*
- *Epson & IBM Graphics Emulation*
- *Advanced Paper Parking*
- *FREE Starter Kit*
- *FREE Colour Kit*

FREE! COLOUR KIT

RRP	£280.83
STARTER KIT	£29.95
COLOUR KIT	£44.65
TOTAL RRP:	£355.43
SAVING:	£133.35
SILICA PRICE:	£222.08

£189
+VAT = £222.08

192 CPS DRAFT 24 PIN

SWIFT 24 - COLOUR!

The Citizen Swift 24 is one of Europe's best selling printers and has won awards including Printer Of The Year 1990. Its rapid print speed, quality and black or colour options, make it a natural choice.

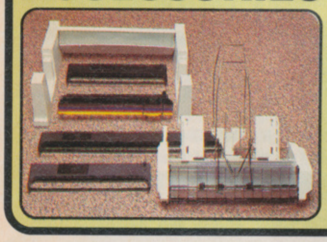
- *24-pin Impact Printer*
- *Print Speed 192cps Draft*
- *4 NLQ Fonts (64cps)*
- *8K Buffer*
- *Epson, IBM & NEC P6+ Emulation*
- *Advanced Paper Parking*
- *FREE Starter Kit*
- *FREE Colour Kit*

FREE! COLOUR KIT

RRP	£428.88
STARTER KIT	£29.95
COLOUR KIT	£44.65
TOTAL RRP:	£503.48
SAVING:	£199.15
SILICA PRICE:	£304.33

£259
+VAT=£304.33

PRINTER ACCESSORIES



SHEET FEEDERS		
PRA 1200	**120D**	**£71.38**
PRA 1215	**124D/Swift 9/24**	**£88.70**
PRA 1228	**124D/Swift 9/24**	**£42.00**
SERIAL INTERFACES		
PRA 1189	**120D+**	**£56.45**
PRA 1209	**Swift 9/124D**	**£32.25**
PRA 1709	**Swift 24**	**£26.38**
PRINTER STAND		
PRA 1242	**124D/Swift 9/24**	**£24.03**
ORIGINAL RIBBONS		
RIB 3520	**120D/Swift 9 Black**	**£4.11**
RIB 3924	**124D/Swift 24 Black**	**£4.70**
RIB 3936	**Swift 9/24 Colour**	**£15.63**
COLOUR KITS		
PRA 1236	**Swift 9/24**	**£39.65**

All prices include VAT and Free delivery.

FREE! STARTER KIT

Every Citizen printer from Silica, comes complete with the Silica Printer Starter Kit, including everything you need to get up and running with your new printer immediately, FREE OF CHARGE!

- *3½" Dual Format Disk with Amiga & ST Printer Drivers*
- *3½" Disk with Drivers for Microsoft Windows 3*
- *2 Metre Parallel Printer Cable*
- *200 Sheets of High Quality Continuous Paper*
- *200 Continuous Address Labels on Tractor Feed*
- *5 Continuous Envelopes on Tractor Feed*

If you already own a printer, and would like a Silica Printer Starter Kit, you may order one (ref: KIT 5000) for the special Silica price of £24.95 - £5 off RRP!

NORMAL RRP
£29.95

PRINTER PACK

SILICA SYSTEMS OFFERS YOU

- *FREE OVERNIGHT COURIER DELIVERY:* On all hardware orders shipped in the UK.
- *TECHNICAL SUPPORT HELPLINE:* Team of PC technical experts at your service.
- *PRICE MATCH:* We normally match competitors on a "Same product - Same price" basis.
- *ESTABLISHED 12 YEARS:* Proven track record in professional computer sales.
- *£13M TURNOVER (with 60 staff):* Solid and reliable with maintained growth.
- *BUSINESS/EDUCATION/GOVERNMENT:* Volume discounts available for large orders.
- *SHOWROOMS:* Demonstration and training facilities at our London & Sidcup branches.
- *THE FULL STOCK RANGE:* All of your PC requirements from one supplier.
- *FREE CATALOGUES:* Will be mailed to you with offers and software/peripheral details.
- *PAYMENT:* By cash, cheque and all major credit cards.

Before you decide when to buy your new printer, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after you have made your purchase, when you may require additional peripherals or software, or some technical help and advice. And, will the company you buy from contact you with details of new products? At Silica Systems, we ensure that you will have nothing to worry about. Silica Systems is one of the UKs leading independent computer dealers and provides a quality service to users at home, in education and in business throughout the nation. Silica have been established for over 12 years, and have an annual turnover of £13 million. With our unrivalled experience and expertise, we can now claim to meet our customers requirements with an understanding which is second to none. But don't just take our word for it. Complete and return the coupon now, for our latest Free literature on the Citizen printer range and begin to experience the "Silica Systems Service".

SILICA SYSTEMS

MAIL ORDER: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX **Tel: 081-309 1111**
Order Lines Open: Mon-Sat 9.00am-6.00pm No Late Night Opening Fax No: 081-308 0608

LONDON SHOP: 52 Tottenham Court Road, London, W1P 0BA **Tel: 071-580 4000**
Opening Hours: Mon-Sat 9.30am-6.00pm No Late Night Opening Fax No: 071-323 4737

LONDON SHOP: Selfridges (1st Floor), Oxford Street, London, W1A 1AB **Tel: 071-629 1234**
Opening Hours: Mon-Sat 9.30am-6.00pm Late Night: Thursday until 8pm Extension: 3914

SIDCUP SHOP: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX **Tel: 081-302 8811**
Opening Hours: Mon-Sat 9.00am-5.30pm Late Night: Friday until 7pm Fax No: 081-309 0017

To: Silica Systems, Dept NCE 0891 - 55, 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX

PLEASE SEND CITIZEN PRINTER INFORMATION

Mr/Mrs/Ms: .... Initials: .... Surname: ....

Address: ....

....

.... Postcode: ....

Tel (Home): .... Tel (Work): ....

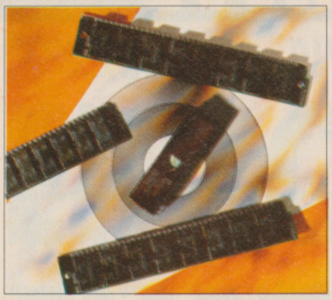
Company Name (if applicable): ....

Which computer(s), if any, do you own? ....

E&OE - Advertised prices and specifications may change - Please return the coupon for the latest information.

WHAT'S NEW

Does this page contain the latest, and possibly the greatest, hardware and software coming hot off the production line? You'll only know by reading it



• Make sure your favourite Tosh doesn't become just a tiny memory with a Piiceon RAM

Up and away!

PRODUCT: Memory upgrades for Toshiba laptops
NAME: Piiceon RAM
COMPATIBILITY: Toshiba T5200 and T8500 portables

Portable computing is becoming more and more popular as the machines evolve from luggable monsters to lightweight helpmates. And with this popularity comes the need for extra memory.

Piiceon's RAM upgrade kits are aimed at two of the most popular laptops on the market and come in two configurations; 2 and 8Mb.

According Piiceon, the upgrades have been thoroughly tested by Toshiba and are even listed in the latter's Technical Information Guide.

Price: £295 for 2Mb. £1,295 for 8Mb
Availability: Now
Target users: People who require heavy RAM useage while on the move
Contact: Piiceon: 0734 892222
Perceived competition: Toshiba itself, although it has recommended the upgrades.

Checked mate

PRODUCT: Spell checker
NAME: SpellMaster
COMPATIBILITY: Cambridge Z88

The Z88 is not one of those machines which makes the headlines, or even the news pages anymore. However, it remains a popular choice of portable computer.

This new spell checker comes on a 128K EPROM (Electronically Programmable Read Only Memory) pack with a 60,000 word vocabulary. It also comes with a text editor called *Quickedit* from which you can print directly, and the *WordFinder* pop-down dictionary.

SpellMaster comes as part of an integrated Z88 package from Ranger Computers called the Ranger Executive which also includes communications, data compression, file encryption and VT100 emulation software.

SPELLMASTER

• Sir Clive Sinclair did leave us with one lasting machine – the Z88. Now you can be literate on it with *SpellMaster*

Price: Ranger Executive pack: £499
Availability: Now
Target users: Executives on the move
Contact: Ranger Computers: 0604 589200
Perceived competition: Mainly the Tandy WP2.

Ventura Scouts

PRODUCT: Various desktop publishing packages
NAME: Ventura Publisher, Scan, Separator, Colorpro, PhotoTouch
COMPATIBILITY: PC (running *Windows*)

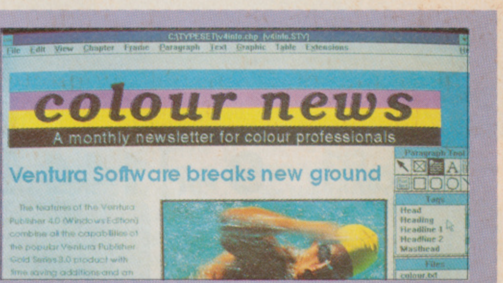
Ventura has updated a wide range of its desktop publishing tools to cope with *Microsoft Windows* on the PC, and do it in colour.

First off the blocks is *Ventura Publisher version 4*. Launched this month it has been re-written from previous versions to make use of full colour. It supports 24-bit colour, colour TIFF and PICT picture formats, Pantone spot and process colour, import of *Microsoft Word* documents, and cross support for Apple Macintosh, OS/2, DOS and GEM.

Next up is *ColorPro*. This software allows for colour correction and separation. The company claims that *ColorPro* is able to produce colour separation to be ouput by 'virtually all printers including high-end Linotronic and Scitex printers. This places it on a par with Macintosh systems.

Third in the line up is *PhotoTouch*, an image processing tool which provides both grey scale and full colour correction, retouching and masking of scanned or imported images.

Next is *Scan*. This software supports a wide range of scanners and is capable of creating full colour, black and white and greyscale scans from within *Ventura Publisher*. On screen previews enable image cropping or colour correction. Once scanned, the images are saved in TIFF format.



C:\TYPESET\v4info.chp (v4info.STY)
File Edit View Chapter Frame Paragraph Text Graphic Table Extensions
Paragraph Tool
Tags
Head
Heading
Headline 1
Headline 2
Masthead
Files
colour.txt

colour news

A monthly newsletter for colour professionals

Ventura Software breaks new ground

The features of the Ventura Publisher 4.0 (Windows Edition) combine all the capabilities of the popular Ventura Publisher Gold Series 3.0 product with time saving additions and an

• Ventura Publisher for the PC. A window onto high quality desktop publishing at long last? And there are three subsidiary packages to go with it

Finally we have *Separator*. This is not aimed at the home user but at those who require high-end colour separations. Text and images can be separated prior to printing.

Price: Publisher £695. ColorPro £2,995. Scan £295. Separator £395
Availability: Now
Target Users: PC owners who require high-level desktop publishing tools operating under Windows
Contact: Ventura: 081-740 4455
Perceived competition: Apple Mac systems ie: Quark Xpress.

Drive drive!

PRODUCT: CD-ROM drive
NAME: Hitachi CDR-1700S
COMPATIBILITY: PC

Just a short one here. No Compact Disc Interactive (CD-I), not the fabled CDTV drive, just a simple CD-ROM drive offered at a discount price by Action Computer Services.

The drive offers random access time of 340 milliseconds, transfer rate of 153.6K per second and has a buffer of 32K. It is also possible to link up to eight drives via daisy chaining them.

Price: AT/XT and ISA PCs: £465. (Minimum recommended £595) PS/2 models 55 and above £550 (MRP £665)
Availability: Now
Target users: PC owners requiring high-speed mass data storage.
Contact: Action Computer Supplies: 0800 333333
Perceived competition: None at this price. However the range of Philips CD-ROM drives offer high quality alternatives.

• Cheap CD-ROM drives? Well cheap is a relative term but you could do worse than take a look at the Action

In brief

PRODUCT: Programmer's Editor
NAME: BRIEF
COMPATIBILITY: DOS and OS/2

Solution Systems has announced an upgrade to its *BRIEF* programming editor. Version 3.1 now comes with Logitech and Microsoft mouse compatibility, and enhanced window control. You can now zoom windows, close up and move around using horizontal and vertical scroll bars. *BRIEF* also comes with the ability to open as many windows as you require on screen, move text between them, and even edit the same piece of text in more than one window.

Price: £199. Upgrades available for £60
Availability: Now
Target users: PC using programmers
Contact: Solution Systems: 0763 244141
Perceived competition: None.

Sample tastes

PRODUCT: Sample editor
NAME: Slam
COMPATIBILITY: Atari ST (and Akai synths)

According to the rather over-the-top press release which extolled the virtues of *Slam*, if you have over 50 Akai samples then you need *Slam* to catalogue them. It acts as a straightforward sample editor, reading data directly via MIDI, from Akai DD disks, or by typing it in. It will also produce hardcopy labels and reference material. Search facilities are also included.

Slam will run on all STs from the 520 up, in high or medium resolution. It will also run under memory switching programs like Clab *Softlink* and Steinberg's *Switcher*. And it can also be used to catalogue ST format disks.

Slam can be used in conjunction with Akai S1100,1000, 950, 900, 612, 700, X7000, and MPC60 machines.

Price: £89 (add £10 for membership of the European MIDI Assn.)
Availability: Now
Target users: ST and Akai using musos
Contact: Intrinsic Technology 081-761 0178
Perceived competition: None in this field. ■

Commodore
CARTOON CLASSICS
AMIGA 500
DPAINT III
ARCADE ACTION GAMES PACK
CHESS PLAYER 2150
LIVE AND LET DIE
ONSLAUGHT
PAINT III
WITH 1Mb RAM

AMIGA

STAND-ALONE 500 COMPUTER

● 512K AMIGA	£329.99
● TV MODULATOR	FREE
● MOUSE CONTROLLER	FREE
***PLUS!* - FREE FROM SILICA**	
● ARCADE ACTION PACK	£229.78
● PHOTON PAINT 2.0	£89.95
TOTAL RRP:	£649.72
YOU SAVE:	£320.72
SILICA PRICE:	**£329**

PLUS! ***FREE*** HOLIDAY ACCOMMODATION

NEW! CARTOON CLASSICS PACK

HARDWARE:	
512K AMIGA 500	£329.99
A520 TV MODULATOR	FREE
A501 RAM EXPANSION	£99.99
SOFTWARE - ENTERTAINMENT	
BART SIMPSON	£24.99
CAPT PLANET & PLANETEERS	£25.99
LEMMINGS	£25.99
SOFTWARE - PRODUCTIVITY	
DELUXE PAINT III	£79.99
PLUS! *FREE FROM SILICA*	
ARCADE ACTION PACK	£229.78
PHOTON PAINT 2.0	£89.95
TOTAL RRP:	£906.67
YOU SAVE:	£507.67

PLUS! 16 NIGHTS FREE HOLIDAY ACCOMMODATION

£399

SILICA PRICE - INC VAT + FREE DELIVERY

ARCADE ACTION GAMES PACK

£329

SILICA PRICE - INCLUDES VAT + FREE DELIVERY

FREE! FROM SILICA WITH EVERY AMIGA

ARCADE ACTION PACK

The new Arcade Action Games Pack is THE software compendium for Amiga owners, featuring ten top titles with a variety of different types of games for you to enjoy. Each title is packaged in its own plastic case, with a colour sleeve and full instructions. The Arcade Action Pack is FREE! when you buy your Amiga 500 from Silica.

FREE! WORTH: **£219.78**

CHESS PLAYER 2150
LIVE AND LET DIE
ONSLAUGHT
ARCADE ACTION GAMES PACK

FREE! PHOTON PAINT 2.0 GRAPHICS PACKAGE

Every Amiga 500 from Silica Systems comes with a FREE Photon Paint 2.0 (RRP £89.95), one of the most advanced art packages available for the Amiga. With it, you will be able to harness the extraordinary graphics power of the Amiga and produce inspirational pictures in minutes. With 4096 colours, your pictures will reach life-like appearance. These can be animated in real-time using a vast range of graphical effects, including blending colours and dithering, stencils, shadowing, contour mapping and surface mapping.

WORTH **£89.95**

PHOTON PAINT

FREE! 16 NIGHTS HOLIDAY HOTEL ACCOMMODATION

Every Amiga from Silica comes with a FREE 72 page, full colour brochure with accommodation vouchers. These vouchers entitle 2 people to stay up to 16 nights in one hotel (or any number of hotels to a total of 16 nights) with accommodation FREE (you could take up to six nights for four people, or other options). Choose from the 250 hotels featured in the catalogue. All you have to pay for are your meals (prices are listed in the brochure). Reduced rates in top London hotels and hotels in France are also featured.

TOTAL FREE PACKAGE

***ARCADE ACTION PACK* - £229.78:**	
Asterix - *By Coktel Vision*	£24.99
Chess Player 2150 - *By CP Software*	£24.95
Drivin' Force - *By Digital Magic*	£24.95
Live & Let Die - *By Elite*	£19.99
Onslaught - *By Hewson*	£24.99
Pipe Mania - *By Empire Software*	£24.99
Rick Dangerous - *By Firebird*	£24.99
Rock 'n' Roll - *By Rainbow Arts*	£19.99
Skweek - *By US Gold*	£19.99
Trivial Pursuit - *By Domark*	£19.95
***ART PACKAGE* - £89.95:**	
Photon Paint 2.0 - *By MicroIllusions*	£89.95
TOTAL RRP:	£319.73

FREE! WORTH NEARLY: **£320**

PLUS! ***FREE*** HOLIDAY ACCOMMODATION

SILICA SYSTEMS OFFER YOU

- ***FREE OVERNIGHT COURIER DELIVERY:*** On all hardware orders shipped in the UK.
- ***TECHNICAL SUPPORT HELPLINE:*** Team of Amiga technical experts at your service.
- ***PRICE MATCH:*** We normally match competitors on a ''Same product - Same price'' basis.
- ***ESTABLISHED 12 YEARS:*** Proven track record in professional computer sales.
- ***BUSINESS + EDUCATION + GOVERNMENT:*** Volume discounts available for large orders.
- ***SHOWROOMS:*** Demonstration and training facilities at our London & Sidcup branches.
- ***THE FULL STOCK RANGE:*** All of your Amiga requirements from one supplier.
- ***FREE CATALOGUES:*** Will be mailed to you with offers and software/peripheral details.
- ***PAYMENT:*** By cash, cheque and all major credit cards.

Before you decide when to buy your new Amiga computer, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after buying your Amiga, when you may require additional peripherals or software, or help and advice with your new purchase. And, will the company you buy from contact you with details of new products? At Silica Systems, we ensure that you will have nothing to worry about. We have been established for over 12 years and, with our unrivalled experience and expertise, we can now claim to meet our customers requirements with an understanding which is second to none. But don't just take our word for it. Complete and return the coupon now for our latest Free literature and begin to experience the ''Silica Systems Service''.

☎ MAIL ORDER HOTLINE **081-309 1111**

SILICA SYSTEMS

MAIL ORDER:	1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX		**Tel: 081-309 1111**
Order Lines Open:	Mon-Sat 9.00am-6.00pm	No Late Night Opening	Fax No: 081-308 0608
LONDON SHOP:	52 Tottenham Court Road, London, W1P 0BA		**Tel: 071-580 4000**
Opening Hours:	Mon-Sat 9.30am-6.00pm	Late Night: Thursday until 8pm	Fax No: 071-323 4737
LONDON (SELFRIDGES):	1st Floor, 369 Oxford Street, London, W1A 1AB		**Tel: 071-629 1234**
Opening Hours:	Mon-Sat 9.30am-6.00pm	Late Night: Thursday until 8pm	Ask for extension 3914
SIDCUP SHOP:	1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX		**Tel: 081-302 8811**
Opening Hours:	Mon-Sat 9.00am-5.30pm	Late Night: Friday until 7pm	Fax No: 081-309 0017

To: Silica Systems, Dept NCE 0891 - 60, 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX

PLEASE SEND FREE AMIGA COLOUR CATALOGUE

Mr/Mrs/Ms: .... Initials: .... Surname: ....

Address: ....

....

....

Postcode: .... Tel: ....

Which computer(s), if any, do you own? ....

E&OE - Advertised prices and specifications may change - please return the coupon for the latest information.

IMPORTANT NOTICE TO THE PUBLIC

It is with regret that the Consumer Side of the European Computer Entertainment Show at Earl's Court 6th - 8th September

HAS NOW BEEN CANCELLED.

It will not be possible for Members of the public to gain entry to Earl's Court on the above dates.

Dolan 286/12 £489

- ☆100% IBM Compatible
- ☆Desktop Case & 220W Power Supply
- ☆1Mb RAM (exp. 4Mb)
- ☆AMI Bios, LIM 4 & Shadow RAM
- ☆102 Key UK Keyboard
- ☆***1.44Mb 3.5" Floppy Drive or***
- ☆***1.2Mb 5.25" Floppy Drive***
- ☆***45Mb 28Ms IDE Hard Drive***
- ☆SVGA Card w/1Mb (256 Colours)
- ☆2 Serial, 2 Parallel Ports

SVGA Mono System (complete)	**£489**
SVGA Colour System (complete)	**£669**

Dolan 486/33 £1349

- ☆100% IBM Compatible
- ☆Desktop Case & 220W Power Supply
- ☆4Mb RAM (exp. 32Mb), 256Kb Cache
- ☆AMI Bios - Password Protection
- ☆102 Key UK Keyboard
- ☆***1.44Mb & 1.2Mb Floppy Drives***
- ☆***45Mb 28Ms IDE Hard Drive***
- ☆SVGA Card w/1Mb (256 Colours)
- ☆2 Serial, 2 Parallel Ports
- ☆DOS 5 (standard)

SVGA Mono System (complete)	**£1349**
SVGA Colour System (complete)	**£1499**

ONE YEAR ON-SITE WARRANTY £45

PRICES EXCLUDE VAT & DELIVERY
PAYMENT BY VISA/ACCESS /AMEX
PRICES AND SPECS. SUBJECT TO CHANGE

Above systems are availble in other configurations. Please call us with your requirements.

FAX/MODEM
2400/9600 baud
£145.00

MODEM
2400 baud Int.
£65.00

MOUSE
Microsoft comp.
£15.00

also available...
Dolan 286/16,386sx/16, 386sx/20, 386dx/25, 386dx/33, 486/25, 386sx/25 Notebook

Personal Callers welcome. Open 6 days a week
Mon-Fri 9am-6pm Sat 10am-5pm

DOLAN COMPUTER SYSTEMS plc
Dolan House, Johnstown, Carmarthen Dyfed SA31 3RB

SALES: **0267-234444**
FAX: **0267-231863**

EXPRESS MAIL

Righting the wrongs of PD libraries, tackling relativity theory, considering differential electron voltages, coding hidden messages to terrorists – yep, it's Haydn Fitz-Williams answering this week's letters...

PD Defence 1

I am writing to you with reference to a letter published in *NCE* issue 145 under the heading 'Service!' This letter was included by Mr Fitz-Williams WITHOUT checking the accuracy and truthfulness of its contents. Most of what is said in this letter is untrue and I feel that it has been extremely damaging to the good reputation of my company.

Hundreds of customers could testify that we provide one of the best services around and neither I nor any of my staff have ever shown anything other than the greatest respect for our customers.

The situation basically came about because Mr Burgin returned several disks from an order, demanding that they be replaced with alternative titles. As with any software that is returned to us, we checked each and every disk out for errors or other problems. We could find absolutely nothing wrong with any of the disks, so we consulted Mr Burgin's letter. In it he complains about the game *Llamatron*: 'Very crude graphics, not suitable for an 11 year old girl'. When we looked at his letter again, we saw that most of his complaints were of a similar nature.

Our terms and conditions of trading are clearly defined as follows: 'We make no warranty with regards to the suitability of any software for any given purpose and we do not accept any responsibility for errors in this catalogue'. This is clearly mentioned in our disk catalogue, along with a request that people send SAE's when returning software. Whenever we have software returned and we find that the problem is actually our fault, we issue a credit note to cover the cost of the SAE.

In Mr Burgin's case he has clearly ignored just about every one of our terms and conditions and when a letter was sent to him (politely) pointing this out, he seems to feel offended and insulted.

I thank you for your assistance in this matter

Nicholas Klee, Jennix Pd

POINTS TAKEN Nicholas – and I'm sorry for any damage I may have inadvertently caused. You'll be pleased to know your letter was only one of many that sprang to the defence of your company. It seems you are very well respected – as the next letter goes to show.

PD Defence 2

I have been a reader of *NCE.* for several years now and have had no complaints. Up until now that is. First of all you have the nerve to print a letter from LAPD about them basically wearing halos and not having X-rated software because, and I quote: 'Software like this can do nothing for the image of computing'. I mean, come on LAPD you have an X-rated section for God's sake. So either shut up or get rid of it – you can't have it both ways.

My second paragraph is basically in defence of Jennix PD concerning the letter from D R and E E Burgin from Chippenham (issue 145). I have known Nick for a while now and was very surprised to read a customer had been dissatisfied with his service. What the customer had failed to mention was that there was absolutely nothing wrong with the disks he was sending back. He simply didn't like the software.

Now, I have seen Nick's catalogue and it clearly states that if you are returning software that you must include an SAE, and if it is the fault of Jennix they will repay the postage. This, in my opinion, is a very fair system. And, after all, Nick is only asking for 38p. It will actually cost him nearer 50p to post the 15 disks. And, of these disks the customer returned, one of them was *Llamatron.* And his reason for returning it: 'It had crude graphics not suitable for an 11 year old'. All I can say is 'Ahhh, Diddums!' – *Llamatron* is a classic for God's sake. It is petty minded people like this that make PD libraries wonder why we bother.

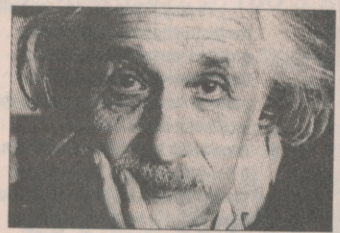
Anyway, I've got that off my chest. Thanks NCE. for an excellent mag and you can count on my 88p in the future.

Stuart Woodhead, Old Coulsdon

Warped!

I know it's the silly season but to allow the 'TOMORROW'S CUTTING EDGE' article pass without comment would be as daft as Terra's statement.

So Terra Computing is claiming that faster than light processing is a feasible proposition... feasible my butt! As Scottie from *Star Trek* says: 'You can't deny the laws of physics, Captain!'



• Al Einstein– smart but not that smart! If only he'd had a time machine he could have got hold of the latest facts!

Our good friend Al ie Einstein had something to say on the subject. The speed of light is a constant 300,000 kilometers per second, irrespective of the speed of its source. That's it folks, check out Einstein's Theory of Relativity.

Nothing can exceed light speed. To even reach this speed of sending electrical signals on any computer will be a major undertaking due to resistance in circuitry, fibre optic cables, etc. Check out current research into Super Conductivity and some non-silicon switching devices to lower electrical resistance for greater increases in signal transmission. Light speed cannot be passed, check out Al's Special Theory. Anybody who suggests otherwise is talking a load of rubbish.

Remember, we are talking about the real world here, not some quasi-metaphysical crap, maybe Terra's contact with the 'Dept. of Defence' (sic) has screwed them up. You know what they say about 'Military Intelligence'... a contradiction in terms!

H Warren, Dublin

BUT OLD AL'S theories, elegant though they may be, have never been proven, have they matey? And anyway, what about those tachyons that scientists

WANTED!

Your honest opinion of *EXPRESS*

■ **To help us keep improving your favourite magazine, please fill in and return this form**

1. How did you buy this issue?

☐ I subscribe
☐ Newsagent delivered it to my home
☐ Asked newsagent to reserve copy
☐ Bought it on planned shop visit
☐ Just happened to see it and liked it

2. Rate *NEW COMPUTER EXPRESS* in terms of value for money:

☐ Excellent! ☐ Good
☐ Reasonable ☐ Poor ☐ Ripoff!

3. Out of ten, how much did this week's cover make you want to look inside?..................../10

4. How much does this issue appeal to you overall?.........................../10

5. How does it compare with previous issues you've seen?

☐ Much better! ☐ Slightly better
☐ About the same standard
☐ Slightly worse ☐ Much worse!

6. Rate out of ten this and any other computer magazines you read regularly:

NEW COMPUTER EXPRESS............./10
..../10
..../10

7. Out of ten, how useful did you find this week's main feature?

..../10

8. What do you like *most* and then *least* about this issue?

I *most* like ....
....
....
....

And I *least* like ....
....
....
....

Your name and address: ★

....
....
....
....

★ Leave blank if you wish – but we may want to send you details of exclusive special offers

● No stamp needed if posted in UK.

Return to: ***NCE*, Issue 147 Survey, Future Publishing, Freepost, Bath, Avon BA1 2XF.**

ON THE COUCH

This week our resident *Express* psychiatrist Dr Clare Anthony examines KEITH of LYTHAM ST ANNES formerly of Weston-Super-Mare.

Keith forgot to include his real name but no matter, he sent in the name of the machine he owned, his favourite software and the machine he most wanted to own – all to : Leather Couch Clare, *New Computer Express*, 30 Monmouth Street, Bath BA1 2BW.

So Keith, let's get down to some serious investigative journalism this time shall we? Here, just bite on this court order and relax...

- ● MACHINE OWNED:
  You name it!
- ● FAVOURITE SOFTWARE:
  Navigator
- ● DESIRED MACHINE:
  I don't plan buying any.

I'm afraid you're in deep, deep trouble Keith and do you know why? Because you're living in a fantasy world. The problem with people who have acquired a large number of computers is that they don't know when to stop. I expect the Mac IIsi and CDTV are just the latest in a long line of machines you've obtained and then grown tired of. Really, it's a form of addiction that knows no bounds and, take it from me, it'll end in tears.

The reason's quite simple. There's only a finite number of machines and amassing the entire stock can only lead to imprisonment. The *Navigator* software is the give away. It represents a continual search for the right route through life, constrained only by the hardware at hand. But whatever the hardware, the only route for you is the road to oblivion and it really is quite futile to expect to find an escape route via a software solution. In short, you're going nowhere and *Navigator* doesn't have it listed in its database.

When I first examined your case I thought 'here's a cocky blighter' but after closer analysis I realise just how deeply troubled you are. If you have no desire to own any machines, this can only mean two things. One, you indeed do have all of them – an unlikely possibility – or two, you don't plan to actually buy anything at all – preferring to use other means of appropriation. Personally, I think you're living under the illusion that you are smarter than your peers.

PROGNOSIS: Give yourself up now while you still stand a chance. You will shortly realise that occasional access to an Archimedes at Her Majesty's Pleasure is far better for your health than prolonged excursions through the continent being chased by legions of private detectives.

reckon travel faster than light – they can be at two places at the same time.

Virtually here

I have just been on holiday in sunny Bournemouth/Poole. In Poole there is a leisure park called Tower Park, in which is a MegaBowl Ten-Pin bowling place. Near the arcade machines they have a Virtual Reality game, a flight sim. I just had to have a go.

To play it was £1, so I read all the instructions and sat down, grabbed the helmet and came to the following conclusion. The game is named as such, due to the fact that it is VIRTUALLY impossible to put the HELMET on. It flopped about on my head; the instructions were not correct; you have to pull a horseshoe-shaped lever down to clamp it to your head. I was not the only one as I watched other people wrestle with the helmet.

Once the helmet was on, I was prepared to be knocked senseless. To be truthful, I was not impressed. Knocked about with wet lettuce was more the feeling. I expected to have my senses reeling and my eyeballs rolling. I could probably have got better results if I had two 1084 monitors strapped to each eyeball and playing *F15 Strike Eagle II*. If that is Virtual Reality, you can keep it!.

J S Smith, Sheffield

I DON'T KNOW which VR system you're talking about J S but the Virtuality system I had a go on – see review pages 55 &56 this issue – is pretty damned hot – and the helmet fits nicely too!

Censored

You always have censors, doctors, professors, etc., claiming that violent videos and video nasties rot the brain and even cause people to go on rampages with chainsaws and UZI 9MM's. But how about Computer Games? You can't tell me they don't effect the subconscious mind, all this punching, kicking and mindless blasting. I think software should have warning stickers telling Joe Punk. It could have scenes unsuitable for the faint-hearted. I've just been playing *Lemmings* and now I feel like jumping into a bottomless pit.

Matthew Hammett, Leicester

I THINK that by and large you can tell whether a game's going to be violent or not by looking at the screenshots on the packaging. Also, I reckon, that in advertising a game as violent, by labelling it with warning stickers, you would probably end up selling more copies. Still, I'm prepared to be contradicted on this one. Any other readers out there think violence in games should be labelled? Or feel they've become a psycho-killer as a result of playing them? If so, send your letters to 'I am going to top you', *NCE*, 30 Monmouth St, Bath BA1 2BW

Pedant's point (strictly not a point but a subset of two-dimensional space)

ONE OF HAYDN'S WINNERS £5

So the latest Spectravideo joystick, the Gravis, 'sticks to the table like electrons to the nucleus of an inert element'. What exactly does that mean? The inert element which hangs on to its electrons the most tenaciously is neon. The energy required to remove an electron from neon is 20 electron volts (eV). In contrast the energy expended by a flea cocking its back leg is about 1,000,000 electron volts! It seems that this joystick adheres about as well to the table as does dihydrogen oxide to the dorsal surface of a member of the genus Anas.

Frank J Hollis, Harlow

And that'll teach copy writers to check their facts in future won't it guys? Actually, the energy expended by a flea cocking its back leg is only marginally less than the energy required to write in and point out facts like 'the energy expended by a flea cocking its back leg is about 1,000,000 electron volts!' But since you are the first pedant to have written in to these pages in, oh, two years or so, I'm sending you a fiver for your undoubted trouble.

Power packed

NCE is packed with power, Why? Well on these hot summer days, with mass insect attacks, which weekly mag is thick enough to swat those wasp and flies dead, without ruining? *NCE*! Nice one, Future Publishing.

Plus *NCE* has a glossy cover which makes it easy to wipe off what is left of the insect on the cover! One swat only needed, WAM, BAM nice one *NCE*. Cheers Future and All the Best in future power packed issues.

Anon

FROM NEXT WEEK it'll be an even handier weapon for deterring insect attacks. Check out page 58 for the full, incredible details. You'll simply be able to take the plastic bag off the cover and place it over your head for protection. **Warning: Readers under the age of 2 should ignore this last sentence.**

Smutty stuff

Right from its inception *NCE* has set itself up as a knight in shining armour, campaigning on behalf of all that is good and decent – ha! Me and my team of researchers (the cat and budgie) have discovered the insidious truth – the hidden meaning behind the name – *NEW COMPUTER EXPRESS*.

Anyone with eyes (and the appropriate software) can see that your company appellation is an aberration. It is in fact composed of anagrams of the headlines which you really want to print. Oh yes, it's obvious that you're dissatisfied with your lot and would much rather be writing for the NUDES OF THE WORLD or the DAILY SCUM. Check it out. Hidden within the title of your publication you will find the following banner headlines...

WE SEE PC SEX ROMP RUNT
SURE, WE EXPECTS PORN – M
(presumably a signature)
SEX ROMPS CURE NEW PET
PEER ON SEX SCRUM WEPT
SEX-SWOP MEN, PURE CERT
WE SEE X-PORN CRUMPETS

However, there is one saving grace with the final headline... SEX, PORN CREW UPSET ME. Maybe you're not all pervs.

Hope this has given you a bit of a chuckle. It's all good fun – and you can take THAT which every way you like!

Ian Heath,Wirral

IF ONLY WE'D known we would have called it something else. Yep I'm afraid you've found us out! Also contained in the name is a secret message calling on all middle Eastern terrorists to rise up and invade America on 13 December.

Hologames

Sega's new Hologram game, called *Time Traveller* is here in Milton Keynes at 'The Point' Centre. The game play is hard and at £1 a time, very expensive. It's not very addictive, but great fun to watch other people lose.

Graham Hughes, Milton Keynes

ROLL ON holo-displays on your home computer eh? Can't wait myself but word processing might be a little difficult! ■

Write Now

Write and tell Haydn Fitz-Williams what you think! Reach him at: *Express* Mail, 30 Monmouth Street, Bath BA1 2BW. Sorry, no personal replies, even with an SAE and remember, only SOME letters win a fiver

☎ On-line mail

Own a modem? Then squirt us a letter. *Express* has its own area on Aspects bulletin board (061 792 0260) where you can leave mail and upload/download files.

We also have our own conference on CIX. Give this on-line service a ring on 081-390 1244 and talk to us direct! You can also leave E-mail for us on Prestel and Micronet on 011112623, or on Telecom Gold @84:txt152

MediaVALUE

SUMMER SPECIALS

SPECIAL OFFER DISKS PLUS BOX OFFER

10 3.5" DSDD disks + library case	£4.50
10 3.5" DSHD disks + library case	£8.50
10 5.25" DSDD disks + library case	£3.00
10 5.25" DSHD disks + library case	£4.50

100 3.5" DSDD disks + 120 cap storage box £38.00
100 5.25" DSDD disks + 110 cap storage box £28.00

BULK DISKS

3.5" DSDD

	10	25	50	100
3.5" DSDD	38p	37p	35p	33p
3.5" DSHD	87p	87p	87p	87p

3.5" DSDD Sony bulk
40p per disk minimum quantity 10 disks.

STORAGE BOXES

3.5" 40 capacity	£4.50
3.5" 80 capacity	£5.50
3.5" 120 capacity	£6.50

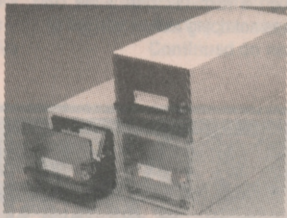
LIBRARY CASES

10 capacity	£1.05
3" disks	each £1.60
Amstrad 8256 ribbons	£2.50

BANX BOXES

Great space saver holds approximately 80 disks. Can be stacked horizontally or vertically.

One box	£9.00
Two or more boxes	£8.00



LABELS

3.5" or 5.25" 100 labels	£1.50
1000 labels	£8.50
3.5" tractor fed	per 100 £1.50
	per 1000 £8.50

ACCESSORIES

3.5" disk cleaner + fluid	each £1.95
3" disk cleaner + fluid	£2.50
5.25" disk cleaner fluid	£1.95
Mouse mat	£2.00
Mouse house	£1.95
Atari + Amiga keyboard covers	each £3.00

BRANDED SONY SPECIAL OFFER

20 branded Sony disks in a sturdy plastic case £12.00 per box

Mediavalue invite you to visit our new showroom. Come along and see our products on display. Great opening offers. Our hours of opening will be 9.30am to 5.00pm Monday-Friday, 10.00am to 4.00pm Saturday.

All our prices include VAT. Prices subject to change without notice. Education and Government orders welcome. All 3.5" disks come with labels. Call now for our price list. We stock 5.25" disks and boxes.

Telephone: (0753) 833555 Fax: (0753) 832394
We offer a no quibble replacement money back guarantee.

Access
VISA

To: MediaVALUE
Dept NCE 22/08
The Business Centre
Vansittart Estate, Windsor,
Berkshire, SL4 1SE.

Tel: (0753) 833555
Fax: (0753) 832394

I enclose a cheque/PO for ……………………

Credit Card No: …………………… Expiry Date: ……………

Signature ……………………

Quantity	Description	Price	Total
		Delivery	

Delivery charges: UK only £2.75
Next day delivery £10.00 (UK) only

Name ……………………
Address ……………………
…………………… Postcode ……………
Telephone …………………… E.&O.E.

AMIGA

- **Is the Amiga suffering because of CDTV?**
- **Mega-compression with *Art Department Pro***
- **Hassle-free back-ups with Silica's *QicTape***

SHUTDOWN

According to a developer source in this country, Commodore has closed down both its *Workbench 2.0* and Unix divisions, leaving only a few staff remaining in these all important areas.

Why? Well, it seems that Commodore made the decision in an attempt to speed up the development of products and enhancements for its CD-based Amiga, the CDTV. Commodore is obviously very keen to see the CDTV become a success as soon as possible, especially with Philips breathing down its neck with CD-I.

Unfortunately, it seems that the Amiga has suffered as a result. Unix was to be the thing that finally put the Amiga into the corporate marketplace, but we can only guess at the fact that it was perhaps a move that didn't quite come off for Commodore.

Commodore has always been very keen to break into the corporate market, so it seems unlikely that it would have made such a rash decision if the Unix Amiga was not doing well.

Perhaps the saddest news of all is the closure of the Workbench development division, which could delay the release of *Workbench 3.0* indefinitely. Now that OS 2.0 has been blown onto ROM, Commodore could quite easily stop at that for the meantime now that the Amiga has become a stable and quite useable system.

I feel this could potentially be a big mistake for Commodore – especially when you consider that the Amiga is already slipping behind such machines as the Mac and PC at an almost frightening rate.

So is Commodore finally starting to bring Amiga development to a halt? Personally I don't think so – even Commodore isn't that stupid. However, it would be very sad indeed if Commodore was to slow down or even stop development of future Amiga products in favour of the CDTV.

The Amiga may well be a powerful and very cost effective system, but it's by no means perfect. If it is to remain a system used by professionals (and not just games players), Commodore owe it to us all to not just maintain the rate of development, but to speed it up.

GET COMPRESSED

Users of ASDG's acclaimed 24-bit image processing system *Art Department Professional* will be pleased to learn that a major upgrade is just around the corner. As exclusively reported in issue 145 of *Express*, *Art Department Pro 2* adds many new features to an already impressive package.

One of the most impressive is JPEG (Joint Photographic Expert Group) image compression, a high performance method of compressing graphic images.

According to ASDG, 24-bit image files amounting to megabytes in size can be compressed down to little more than a couple of hundred kilobytes.

OK, it sounds pretty unbelievable, but JPEG is claimed to offer a compression ratio of something like 80 to 1 with little or no degradation in quality.

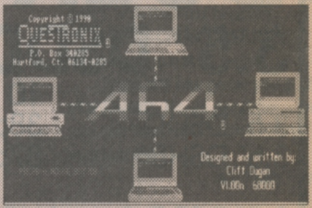
ASDG's JPEG saver module allows the user to specify how much compression should take place. What's more, the loader can enhance compressed images by applying image

IT'S AN EMULATION SENSATION

There is an adage that says the grass is always greener on the other side of the fence. In the case of the Amiga, we generally live on the side of the fence with the lushest grass, but occasionally other machines come up with something to offer.

You could, of course, buy the machine in question, but most of us just don't have large amounts of cash to throw about. The answer lies in an emulator, which is a program that allows the Amiga to mimic another machine, allowing you to run programs written for that machine.

There are a vast range of emulators available commercially, but what you may not realise is that amount of emulators that are available in PD libraries. Believe it or not, you can pick up complete C64, Spectrum, QL, CP/M and even ST emulators in abundance. What's more, they'll set you back little more than the cost of a disk!



• *A64* is a PD program that fully emulates the aged C64, complete with raster tricks and other jiggery pokery

COMPUTER AUCTION

SATURDAY 21ST SEPTEMBER
AT BOWLERS, LONGBRIDGE RD
TRAFFORD PARK,
MANCHESTER M17

Sale starts 10.00am viewing and testing from 8.00am

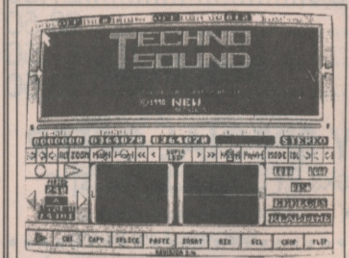
About 1000 lots of computer equipment including:- IBM, Compaq, Amstrad, Toshiba, Apricot, Apple etc. Monitors, printers, disks, modems, software, consumables, home computers etc

FOR YOUR CATALOGUE RING
COMPUTER CONNECTIONS ON
0254 813316

P.S WATCH PRESS FOR POSSIBLE
BIRMINGHAM/MIDLANDS
AREA AUCTION

Why buy an ordinary sound sampler - when you can buy a recording studio?

TECHNOSOUND *Turbo*
SOUND SAMPLING SYSTEM FOR THE
AMIGA



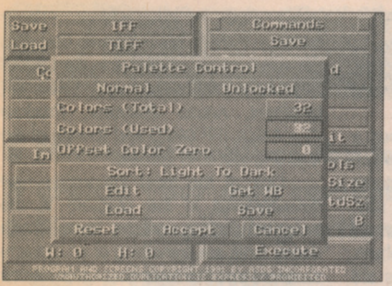
★ *SONG SEQUENCER*
★ *MIDI SEQUENCER*
★ *VARIABLE DIGITAL DELAY*
★ *VARIABLE CUT BUFFER*
★ *FULL MULTITASKING*
★ *57 RECORDED SAMPLES*
★ *STATE OF THE ART TRUE STEREO CARTRIDGE*
★ *OVER 100 INTERACTIVE FUNCTIONS*
★ *SIMPLE TO USE TUTORIAL AND USER GUIDE*
★ *STUNNING REAL TIME EFFECTS INCLUDE:- Echo - Reverb - Hall - Voice Synthesis - Phaser and Vibrato.*
★ *EXTENSIVE EDITING AND LOOPING FACILITIES*

UPGRADE AVAILABLE TO EXISTING USERS FOR ONLY £6.00 + £1.00 P&P

NEW DIMENSIONS
BROOKLANDS HOUSE
BRYNGWYN, RAGLAN
GWENT NP5 2AA
0291-690933/690901

Access VISA

£35.99
+ £1.50 POST AND PACKING



• Now you can save images in JPEG format thanks to ASDG's *Art Department Professional*

processing techniques during decompression, therefore saving a lot of time and enhancing the final image.

On an A3000, an overscanned (268 by 480) 24-bit plane image (which takes up 1.1Mb when uncompressed) can be reduced to less than 30K in just 35 seconds! Pretty impressive stuff.

The implementation of JPEG within *Art Department Pro* fully supports the JFIF standard. This allows image files compressed using JPEG compatible systems on other machines, including the Macintosh, to be brought across and used on the Amiga.

Using a JPEG compatible viewer program (which will undoubtedly appear), it would actually be possible to produce a 24-bit slideshow on a single disk containing image data amounting to tens of megabytes in size.

☎ For more details contact Silica Systems on 081-309 1111.

DISK SAVIOUR

Hard disk users who are looking for a quick and reliable way of backing up their drives may well be interested in a new tape streamer being imported into this country by Silica Systems.

Silica's QicTape system enables you to back up your hard drive onto ultra compact tapes. Each tape can handle up to 60Mb of data with extra large hard drives being spread across several tapes. The tapes are also far more reliable than floppies thanks to a state of the art auto-tensioning design and automatic error detection and correction.

Unlike some other tape streamers, QicTape comes with everything you need to get up and running, including a free 60Mb. Connecting the streamer to your system is as easy as plugging in a floppy drive; it runs through the Amiga's floppy port, so it can be easily swapped between Amigas without having to mess around with bus connectors.

QicTape's scheduler enables you to set up exact times for automatic back up – every day, once a week or even once a year (if you like living dangerously).

What's more, since QicTape fully supports the industry standard QIC-40 format, you can even use QicTape to transfer files to and from the PC and Amiga via QIC-40 compatible tape drives.

☎ Phone Silica on 081-309 1111.

Jason Holborn

ST

● Tramiel reveals the latest on the new STs
● Mutant Turtles and mad scientists for Christmas
● High powered DTP with *PageStream 2.0*

TEA WITH TRAMIEL

Recently, I had the opportunity to chat with Sam Tramiel, the chap who runs the whole Atari show from America. He was in England for a couple of days chatting with developers about future Atari releases before attending the Dusseldorf show (of which more next week).

The interview was extremely enlightening. Tramiel is an interesting man who seems genuinely excited by some of the up-coming Atari computers. He was also extremely reluctant to talk about these machines too much, generally answering such questions with a "wow" or "terrific" when referring to them.

• Book and STylus could be with us sooner than expected, according to Sam Tramiel

Several illuminating things did become obvious. Firstly, Book and STylus (yep, it's been renamed again) are much further along the development schedule than anyone had previously thought. Book's going to hit the shops first and Sam Tramiel tells me that the company has included some extremely interesting new features.

For a start, an add-on floppy drive unit will be ready by October which will enable your Book to chat to an ST or a PC. It will also come with some natty transfer software to make moving your data to and from the Book a simple case of bunging a cable between the two.

The interesting aspect of this development is that your day to day software and information will be stored on RAM cards. Then when you do want to transfer something you can just slot on

Continued on next page ➤

ANALOGIC
ANALOGIC
ANALOGIC

ANALOGIC COMPUTERS (UK) LTD
152 Latchmere Road
Kingston-upon-Thames
Surrey KT2 5TU

Tel. Mon - Sat
8am to 9pm
TEL: 081 546 9575
FAX/TEL: 081-541-4671

SPECIAL OFFER COMPUTERS Amiga/Atari

520 STE Discovery Extra Pack	1 Meg	£339.00
1040 STE Family Curriculum Pack	1 Meg	£349.00
Amiga 500 + Mouse + Modulator		£299.00
Amiga 500 Cartoon Classics		£355.00
Amiga 500 Screen Gem		£355.00

AMIGA/ATARI DRIVES

1 Meg 3.5" internal (SONY)	£49.95
1 Meg 3.5" external	£59.95

AMIGA/ATARI PROTAR HARD DRIVE

"PLEASE CALL"

PHILIPS 15" COLOUR TV/MONITOR Remote Control + Scart Cable ..£239.00

ATARI MEMORY UPGRADES WHILE YOU WAIT!

1. 520 ST/STM/STF/STFM to 1 Meg	£59.95
2. 520 ST/STM/STF/STFM to 2.5 Meg	£159.95
3. 520 STE to 1 Meg	£29.95
4. 520 STE to 2 Meg	£89.95
5. 520 STE to 4 Meg	£169.95

FREE FITTING

★ We specialise in Surface Mount Chips

512K RAM + Clock for Amiga 500	29.95
Amiga/Atari Mouse	24.95

AMIGA and ATARI REPAIRS WITHOUT DIAGNOSTIC FEES
• FIXED CHARGES FAST TURNAROUND

520/1040 (STFM/STE)	£59.95
Amiga 500	£49.95

POWER SUPPLIES for ST with 1 year guarantee £49.95

★ *ALL PRICES INCLUDE VAT AND NEXT DAY DELIVERY*
★ NEW: WE PROVIDE PICKUP SERVICE FROM YOUR PREMISES FOR ONLY £5.00 + VAT. 1. TO REPAIR FAULTY COMPUTER, 2. TO UPGRADE MEMORY.

Access VISA

COMPUTER REPAIRS AND UPGRADES

- *Fast efficient service.*
- *Average turnaround 24hrs.*
- *Experienced, qualified engineers.*
- *Fee includes complete diagnostic inspection.*
- *All repairs carried out covered by free 90 day warranty.*
- *Free registered carrier pickup and return dispatch, for ultimate peace of mind*
- *We deal with IBM compatibles, Amigas, Atari printers & add ons.*

Just send us your Atari together with a fault description, and £15 diagnostic fee and we will provide you with an itemised written quote, most repairs do not exceed £40. For upgrades, phone for part prices, typically at trade prices, and we will fit any upgrade for just £15 + parts.

ACS electronics Access VISA

Business Enterprise Centre, Eldon Street,
South Shields, Tyne & Wear, NE33 5JE.
Telephone: 091-455 4300

MACHINE SPECIFICS

• Those Mutant Turtles return, and its as if they've never been away. Even the plot promises to be very familiar

◄ the disk drive or connect up the cables. There will be five of these new STs on show at Dusseldorf.

Pad has had a checkered development path. Creating hand writing recognition software is never an easy task, especially when it has been designed to "learn" in exactly the same way as the human brain does. Sam told me that this software is just having the finishing touches added to it, and that the case is ready now. Atari is looking to launch the machine by March.

One of the most interesting comments which Tramiel made was about MIDI support. He said that he was aware of the importance of the MIDI market to the ST's success and wasn't about to alienate these people. To this end there will be one or two surprises when the Book hits the streets just after Christmas.

I took the opportunity to ask him about the appearance of an Atari Portfolio in the film *Terminator 2.* He told me that he has two ladies in LA who spend their whole day getting Atari products onto TV, film and radio and into the newspapers.

The Portfolio in this particular film is used to defraud a hole-in-the-wall cash machine, though Sam wouldn't supply me with the software

Oh, and one other thing. ST does in fact stand for 16:32, not Sam Tramiel, there, that's that one laid to rest!

TURTLES RETURN

After the original *Mutant Turtles* game did so well, earlier this year, Mirrorsoft is back with a brand new game based on the *Turtles 2* coin-op. Anyone who had the misfortune to buy the original game probably tired of it after five minutes. So it'll be interesting to see how the sequel turns out.

The plot of the game (as if it really matters) is based on a turtley adventure in New York. Initially you have to rescue April O'Neil (you know, the plastic news hound lady) from a burning building. Gripping stuff indeed.

Then BeBop and Rocksteady, those two attractive minions of Shredder give you some hassle, enabling the hockey masked one to do a runner with Sensi Splinter. Guess what? You then have to rescue Splinter and save the day, hurrah! The game will be out for the ever popular Christmas period.

Also from Mirrorsoft is *Dr Devious*, a weird sounding arcade game in which you have to rebuild different structures against the clock. Again the plot is silly, revolving around a mad scientist who'd like to turn the earth into a cube. Hohum. Mirrorsoft reckons that the graphics are triff, which is a relief as the plot is dreadful. Release date is set for October, price £25.99.

Finally, *Cisco Heat* isn't actually a game about horrid infectious lumps on your body (that'd be *Cisto Heat*), but a game set in San Francisco. It's a coin-op conversion, so don't hold your breath.

The idea of the game is to beat your fellow police squad drivers in a race around the Streets of San Francisco. Mirrorsoft reckons it has loads of doody 3-D graphics and some tasty sound effects. Release is set for November.

PAGESTEAM UPGRADE

Nope, I'm not joking I've actually got my review copy here.

What can I say? It looks absolutely stonking. The chaps at Soft-Logik Publishing have completely overhauled the program while retaining the conventions of the original which made it a bloody sight easier to learn than *Calamus.*

You can import text from absolutely any source in ASCII, or straight in as *Word Perfect, 1st Word* and *Word Writer* packages. These luverly words can then be spiced up with graphics in the form of EPS, GEM, IMG, PCX, GIF, TIFF, IFF, MacPaint, Adobe *Illustrator, Prodraw Clip*, Aegis, IFF DR2D and (breath of air) Mac and IBM EPS formats.

One of the most interesting new developments in the program is the inclusion of Compugraphic fonts. These doody fonts are something of an industry standard and there are absolutely zillions of them available.

You can, of course, also use PostScript fonts. They're all scalable from 183,000 points (rather large doncha think), in increments of .01.

There are tons more of these kind of features included (and I haven't got the space to talk about them here), so check out a review in either this magazine, or *ST Format* soon.

It's available direct from Soft-Logik, 5 Chancery Lane, Cliffords Inn, London EC4A 1BU.

FREE AT LAST

Anyway. That's it folks. I'm handing over this column to a gifted writer who goes by the name of Ed Rickets. He'll be bringing you all the latest Atari news and views and a little bit of Hungarian cheese too, if you're lucky. Thank you for listening. Hurrah!

Andy Hutchinson

Andy Hutchinson and, indeed, Ed Ricketts, both write for ST Format, *the biggest and best ST magazine in The UK.*

RUTLAND COMPUTER SUPPLIES LTD

30 Buckminster Close, Melton Mowbray, Leics, LE13 1ET

TOP QUALITY UNBRANDED DISKS AT DISCOUNT PRICES

3.5" DSDD disks inc. labels	39p each
3.5" DSDD coloured disks inc. labels	45p each
3.5" DSHD disks inc. labels	99p each
5.25" DSDD disks	25p each
5.25" DSDD coloured disks	39p each
5.25" DSHD disks	49p each

All disks are guaranteed 100% error free, packed with sleeves, labels + W/P tabs.

STORAGE BOXES

Lockable anti-static with dividers & keys

3.5" BOXES	£
40 capacity	4.60
80 capacity	5.10
100 capacity	6.10
120 capacity	7.10
Banx boxes to hold 80 3.5" disks	9.95
Posso boxes to hold 150 3.5" disks	14.95
Posso boxes to hold 70 5.25" disks	14.95

5.25" BOXES

50 capacity	4.60
110 capacity	5.20
120 capacity	6.50

CABLES

IBM PC cables 1.8m long	6.15
Centronics to Centronics cable 1.8m	9.50
2 metre joystick extension cable	4.95
RS232 Male-male, female-female, male-female	8.50
Joystick/mouse extension cable	3.95

COMPUTER STATIONERY LISTING PAPER

11 x 9.5" 60gsm 2000 sheets	17.00
11 x 9.5" 80gsm 2000 sheets	20.00
A4 70gsm 2000 sheets	19.00
A4 90gsm 1500 sheets	20.00

QUALITY COMPATIBLE RIBBONS

		1+	5+
Amstrad LQ3500/8256	2741FN	3.15	2.50
Amstrad 9512	2746FN	2.90	2.35
DMP2000/3000	2482FN	2.66	2.10
Brother M1009	2412FN	3.60	2.85
Brother M1509	2479FN	5.00	3.95
Canon 1156	2223FN	3.55	2.80
Citizen 120	2488FN	3.10	2.45
Citizen Swift 24	2939FN	3.90	3.10
Swift 24 colour	Original	17.00	16.00
Epson EX800	2774FN	3.35	2.95
FX800/LX800/MX/FX80	7273FN	2.95	2.35
MX100	2320FN	3.30	2.60
LX80/LX85	2454FN	2.15	1.70
LQ800	2477FN	3.10	2.75
LQ1000/1050	2478DN	3.70	2.90
LQ2500	2795DN	4.05	3.20
LQ2550	2877DN	4.05	3.20
NEC P2200 (+)	2844FN	3.30	2.60
Olivetti DM1/200	2843FN	3.65	3.25
Olivetti DM105	2863FN	4.75	4.35
Panasonic KXP110	2228FN	2.95	2.35
KXP1124, KXP1081	2904FN		
Star LC10	2864FN	2.65	2.30
LC10 colour	2861col	5.00	4.60
LC24-10	2868FN	4.10	3.25
LC24-10 colour	original	12.50	11.60
LC200	original	6.40	6.00
LC24-200	original	9.00	8.00
LC24-200 colour	original	12.50	11.80
LC200 colour	original	12.00	11.00

This is just a small selection of ribbons. If your printer is not listed - please ring for a price.
Originals available on request.

All prices include 17.5% VAT. Post and packing £3.50.
3 day courier £6.50. Overnight £8.50.
All orders are despatched within 24 hours subject to stock availability.

INK JET AND LASER TONER CARTRIDGES AVAILABLE

OFFICE HOURS
9.00am to 7.00pm Monday to Friday
10.00am to 12 noon Saturdays.
PHONE & FAX: (0664) 500878

VISA Access

ATARI and AMIGA
UPGRADES and REPAIRS

ATARI 520 ST FM/M ½Mb

512K UPGRADE (fits all models) £50

ATARI 520 ST 2Mb/4Mb

ATARI 520 ST to 2.5Mb £100
ATARI 520 ST to 4Mb £170

ATARI 520 STE SIMMS

512K to	1Mb	2.5Mb	4Mb
	£30	**£75**	**£135**

PC EMULATORS (ST)

PC Speed £100
AT Speed £210

FLOPPY UPGRADE

1Mb Internal £50

AMIGA MEMORY

½Mb with clock £32
½Mb no clock £27
OTHERS PLEASE CALL

ATARI and AMIGA

Fast guaranteed repairs
low prices
PLEASE CALL

ALL PRICES INCLUDE VAT AND FITTING.
P&P £3 ON ORDERS UNDER £100.

ABEVILLE COMPUTERS LTD.
Imperial House, St Nicholas Circle,
Leicester, LE1 4LF
Tel: (0533) 628182
Fax: (0533) 626636

VISA Access

PC

- **Microsoft outlines the future for DOS**
- **Create your own cartoons in *Windows 3.0***
- **New role-playing action from US Gold**

DOS – THE FUTURE

Windows 3.0 may be the glamour girl of GUI computing at the moment but Microsoft has let it be known that DOS is not forgotten.

The company plans to transfer many Windows features to DOS. A future release of DOS will add underlying support for 32-bit Windows calls, network integration features, some support for the 386 linear address model and an Installable File System (IFS) capability.

DOS will be, "with us forever. We've learned how passionate people are about DOS," Microsoft stated, pointing to the success of *DOS 5.0*.

DOS applications will continue to be limited to 640K of RAM or will use a DOS extender. However, DOS' multitasking support will be enhanced, but that will be through the DOS Protected-Mode Interface, which DOS extender companies adopted last year.

Microsoft may further blur the differences between Windows and DOS by packaging the two in a single box.

"We've heard a lot from users that they want a common installation [procedure]," claims Microsoft.

More DOS rumours included the news that network drivers may be able to be loaded into the high-memory area – a 64K chunk of RAM above 1Mb. In addition, Windows' real mode may be eliminated with *Windows 3.1*, though 286 standard mode will remain.

☎ Contact Microsoft on 0734 500741.

INTEL GOES DIRECT

Intel has said it plans to sell its upcoming 486 microprocessors directly to users, putting the company firmly into the systems business and into more direct competition with its traditional systems manufacturer customers. New, more powerful versions of the 486SX will be sold through retail channels.

"We understand that Intel has its own competitive pressures that it has to respond to," said H Michael Morand, vice president of marketing for AST Research. "But it does make them more of a direct competitor. I guess it's part of our love/hate relationship."

PASCAL PICS

The Whitewater Group is introducing a high-level object-oriented graphics class library designed for use with Borland's *Turbo Pascal for Windows*.

ObjectGraphics for Turbo Pascal for Windows lets you develop graphical applications using graphic objects, rather than primitive procedure calls. The graphics library extends *Turbo Pascal for Windows'* ObjectWindows graphics.

It includes a variety of rendering tools, such as pens, brushes and textpens, and it allows you to select many different attributes, including line styles and fill patterns.

OjectGraphics for Turbo Pascal for

Continued on next page ➤

PROCOMM DEMYSTIFIED

BOOK OF THE WEEK

While comms is a potential minefield for the beginner, the expert can get more than a little confused too.

I'm a *Telix* man myself. However, before that arrived I was an avid user of *Procomm*. I wish I'd known about this book at the time!

Versions 1.1b and 2.0 are covered in *Using Procomm Plus* (second Ed) by Que. Definitely a `How to...' book rather than a reference, it guides you through the basics of communications, how to use *Procomm* and an explanation of its many features.

Probably the most valuable part of the book, for me, was the section on Script commands (a sort of macro language) which always puzzled me, somewhat. Now there's no excuse with this book!

Although a little dry in places there is no doubt that it will provide a valuable addition to the *Procomm* user's armoury.

Available in the UK via bookshops, computer stores or from Computer Manuals (☎ 021 706 6000).

USING
PROCOMM
PLUS
Covers Through Latest Version
que

• *Using Procomm Plus* is a handy step by step guide

Computer Technology Fairs

1ST SCOTTISH NATIONAL COMPUTER FAIR
THOUSANDS OF BARGAINS FOR ALL
For 8, 16 & 32 Bit Computers + Games Consoles.
To be held at " The City Halls" Candleriggs, Glasgow.
On SATURDAY 7th of September 1991 10am to 4.30pm
Only £2.50 admission

The UK's top discount dealers will be present, selling such goods as new and used systems, spare parts, D.I.Y parts, memory upgrade Simms, SIPPS, D-Rams, boards, disk drives, hard drives, mice, books, blank disks, joysticks, printers, faxes, keyboards, monitors, Public Domain/Shareware, disk boxes, disk labels, VGA cards, cables, P.C. Motherboards, 286/386sx, 386dx, 486, controller cards, mouse mats. In fact everything for the hobbyist to the serious user. Just some of the machines & software catered for: IBM, Compaq, PCs in general, Amiga, Atari, Amstrad, Spectrum, C64, Sega Megadrive & Master System, NIntendo, plus many others.

So for the general buyer and bargain hunters diary, it has to be Saturday the 7th of September at the 'City Halls', Candleriggs, Glasgow. From 10am to 4.30pm. Admission only £2.50.

✻✻ SCOTLAND'S LARGEST EVER COMPUTER FAIR. FOR ALL COMPUTER USERS ✻✻

Only a few remaining stands available, for booking contact:
JENNY at: Computer Technology Fairs on Tel/Fax: 0273 607633.
Or write to: C.T.F. 16 Manor Road, Brighton, Sussex BN2 5EE

MACHINE SPECIFICS

◀ *Windows*, which began shipping last week, sells for $195 and requires *Turbo Pascal for Windows*. Source code is available separately for $195. Until October 31, *ObjectGraphics* is available for $99 and the source code is offered at $29.99.

☎ Contact the Whitewater Group 0101 708 328 3800.

ANIMATED WINDOWS

The recent Windows and OS/2 Conference in Boston saw one of the first applications to allow you create, edit and play back animations in *Windows 3.0*.

Gold Disk's *Animation Works Interactive* has three modules that let you combine graphics, animations, text, sound and video.

- With the Cel Editor you can create 'actors' that are capable of movement.
- The Movie Editor lets you move these 'actors' along a path.
- The Background Editor has paint tools for producing backdrops.

You can place actors along straight-line, freehand or gravitationally correct paths. The package doesn't require you to do any scripting. An onion skinning feature lets you view previous and next animations, which simplifies the creation of in-between animations.

Animation Works Interactive, expected to be released in late September for $495, will be bundled with drivers for Microsoft's *Multimedia Windows*, enabling you to add multimedia functionality to presentations without buying extra hardware.

☎ For more details contact Gold Disk on 0101 213 320 5080.

Paul Rigby

US GOLD ROLE PLAYING GAMES

Through two of its affiliate American companies, US Gold is on the brink of releasing two intriguing Role Playing Games (RPGs).

Pools of Darkness is the last in a trilogy of *Forgotten Realms, Advanced Dungeons and Dragons*-based games. Taking you back to Moonsea to face the ultimate enemy (yes, another `ultimate' enemy).

POD offers 256-colour VGA and digitised sound (a first for the *Advanced Dungeons and Dragons* series). Release is scheduled for September.

Planet's Edge, from New World supports all popular graphics modes and sound cards. The Earth has vanished and a `dead' alien spacecraft flies in the missing planet's vicinity. An alien device may hold the key.

The mission? To "...find the raw materials necessary to reconstruct the alien device in hopes of bringing the Earth back into the physical universe". Heady stuff.

CPC

- **£££s off leading products with *CPC Domain***
- ***3-D Construction Kit* finally arrives**
- ***Hudson Hawk* versus *The Shoe People***

3-D CONSTRUCTION KIT

It seems like we've been waiting for Domark/Incentive's DIY Freescape jobbie to come out on the CPC for centuries now, but I have at last got my sweaty maulers on a copy.

The box itself is impressive enough. It's at least twice the size of the biggest ordinary game box, and contains a decent manual, disk (or two cassettes) and... wait for it... a video.

This is heavyweight stuff, and immediately puts pay to any thoughts that you're looking at nothing more than a games creator.

The software includes both 64K and 128K versions of the program, plus a compiler for when you do put together your own interactive environment – which you don't have to start on just yet.

3-D Construction Kit can work on two levels. You can use it just to create your own 'virtual' environments. Here you use a set of create/edit commands to manufacture a variety of polygons which you can then move around, stretch, shrink, rotate and combine.

Having done this, you can colour your 3-D creation using a (fairly limited) colour and shade palette.

The clever stuff comes in when you start creating your own games, however. *3-D Construction Kit* uses its own programming language. Don't be put off, though, because it's pretty logical and simple. An optional map view helps you out if you get confused about where objects are (easily done in three dimensions). Once you've put your program together, the compiler turns it into usable code.

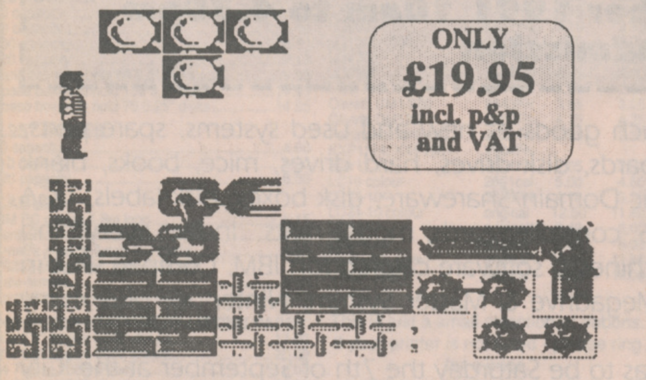
Obviously, there's a lot more to it than that – there's just no space to go into detail here.

The biggest problem is likely to be the price. *3-D Construction Kit* costs £25.99... that made you cough out your choccie digestive, didn't it!

You do get a big fat package for your money, though. But still, at the end of the day, you've got to be a bit of a Freescape nutter to spend that much. Worth it? Depends what you think of *Driller* et al. It's certainly an extremely impressive achievement, and there's enough in it to keep you going for years.

TETRILLER is here !

if you liked Tetris
you'll love Tetriller
...the thriller !



ONLY
£19.95
incl. p&p
and VAT

- Compelling PC game
- Full colour graphics
- EGA/VGA systems
- 10 levels of play

Please call or write and ask for for our free catalogue !

PC Productions Ltd
Kendrick Hall, Kendrick Street, Stroud,
Glos. GL5 1AA. Tel:0453-755200 Fax:0453-755400

FEED YOUR ST!

MEMORY UPGRADES

STE KITS SIMM OR SIP TYPE	NORMAL PRICE	WITH 512K TRADE IN	WITH 1024K TRADE IN
512K TO 1024K	£22.00	-	-
2 MEGABYTE	£80.00	£70.00	£60.00
4 MEGABYTE	£150.00	£140.00	£130.00

All above kits come c/w an illustrated instruction booklet. 2 and 4 Megabyte kits come c/w Free multitasking software. Free fitting available on all above kits

STF(M) KITS	Price
Solder in 1Mb Upgrade Kit	£30.00
1 Megabyte board Expands to 2.5Mb	£68.00
2.5 Megabyte Plug in Upgrade	£95.00
XTRA-RAM Deluxe	
Populated to 2Mb	£110.00
Populated to 4Mb	£159.00

EMULATORS

PC EMULATORS		
PC SPEED hardware emulator for ST.Runs 4 times faster than standard PC. Full I/O compatibility.	Supplied	£90.00
	Fitted	£120.00
AT Speed 16Mhz 286 Processor Norton 8.3.	Supplied	£220.00
	Fitted	£245.00
AT Speed STE adaptor		£25.00
Spectre GCR MAC Emulator (including ROMs)	Supplied	£320.00

CHIPS Etc.

16x256Kx1 Dram Chips	£24.00
16x1Mbx1 Dram Chips for upgrading TCT and Frontier Boards	£70.00

Disk Drives

Internal double sided drive upgrade with spacers	Supplied	£47.00
40Mb Hard Drive with DMA Out, Internal PSU, 17mS access time, Quiet running		£320.00

All goods carry a 14 day returned-as-new money back guarantee.
All memory upgrades carry a 2 year warranty against faulty manufacture.

HOW TO ORDER

Prices Include VAT.

Telephone orders and enquiries welcome on: 081-777 0751
Please make cheques/postal orders payable to: HCS
35 HARTLAND WAY, SHIRLEY, CROYDON, CR0 8RJ.
Goods normally despatched within 2 days of receipt. Trade-in paid as a refund

HUDSON WHO...?

Ocean Software, film licenser extraordinaire, could have picked a real duff 'un with the computer version of *Hudson Hawk*, a film starring the inimitable Bruce Willis and lots of explosions.

A quick straw poll around the office revealed that, yes, everyone had heard of it and no, nobody had seen it. Nobody particularly wanted to, either.

Willis apparently plays an ex-con who's forced into pinching some Leonardo da Vincis by a blackmailer. Is there no honour amongst thieves.

I wait with bated breath (almost).

GREMLIN PUTS THE BOOT IN

Possibly more interesting than *Hudson Hawk* (I wonder...) is *The Shoe People* from Gremlin. The game will be a licence of the award-winning Shoe People cartoon series. No, nobody in the office admits to having seen this either.

The Shoe People is going to be a game (actually, a series of games) with an educational twist.

SCULL PD NEWS

Alan Scully's going great guns with Scull PD at the moment. The latest issue of his fanzine, *CPC Domain* is just out. It costs £1.25 and has 44 pages packed with news, reviews, articles, cartoons and discounts. It also has a catalogue of Scull PD's software at the back.

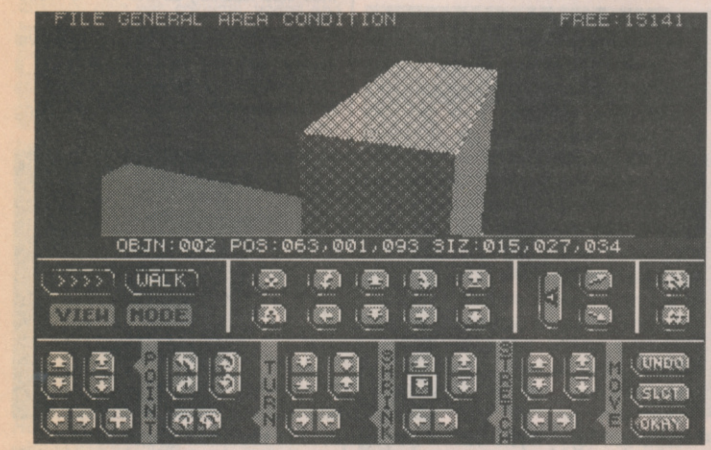
All sounds a bit gushing? Not a bit of it – *CPC Domain* is very well put together. Good one, Alan!

The companies now doing discounts for Scull PD are Goldmark Systems, SPM Software, SD Microsystems and ABC Holdings.

To subscribe to *CPC Domain*, send a cheque for £15 to: *CPC Domain*, 119 Laurel Drive, East Kilbride, Glasgow G75.

On top of all that, Scull's PD prices are down. You can now get two selections (instead of the previous one) for £1, a disk and an SAE. If you're a *CPC Domain* subscriber it'll cost you just 75p plus disk, SAE. There are now 140 selections available.

Rod Lawton


FILE GENERAL AREA CONDITION
FREE:15141
OBJN:002 POS:063,001,093 SIZ:015,027,034
>>>>
WALK
VIEW
MODE
POINT
TURN
SHRINK
STRETCH
MOVE
UNDO
SLCT
OKAY

• ***3-D Construction Kit*:You can view your miniature world from any position, thanks to the extremely formidable control panel**

PRINCE OF PERSIA TIPS

Graham Smith has sent in a tip for the tape version of *Prince of Persia* – it gives infinite lives.

```
1 ' Prince of Persia
2 ' By Graham Smith
3 ' Infinite time
4 '
10 DATA 21,1b,bf,22,35,a4,c3
20 DATA 00,a4,21,24,bf,22,ac
30 DATA 7b,c3,40,00,af,32,5a
40 DATA 23,32,5a,93,c3,00,80
50 FOR j=0 TO 27:READ a$
60 x=VAL("&"+a$):y=y+x
70 POKE j+48914,x:NEXT
80 IF y<>2669 GOTO 100
90 LOAD"":MODE 1:CALL 48914
100 PRINT"data error
```

Meanwhile, here are some tips for the game from Jonathon Copp, Keith Woods and William Huddleston:

- **When you get out of your cell on level one, run right until you are about half a centimetre from the guard then jump – you will go straight past him and on to the last screen of level one. It takes some practice but, when you get it right you can use it the guards on level two.**
- **To defeat the ghost on level 12, step back so that he no longer attacks you and put away your weapon. He will do the same. Then run into him and he will disappear. Go left, then off the edge and a platform will appear beneath your feet.**
- **Your prince can jump in a variety of ways: from a standstill he can jump two tiles and three with a run. When jumping over a gap you have more control from a standstill. Jump (diagonally up) and hold the Fire button so that he can grab the edge of the opposite platform.**
- **Don't ignore the secret rooms – they often contain useful potions. And don't use the potions until absolutely necessary. You cannot kill the skeletons, so fight them back over the edge of the platform.**

Next week in your
New Computer Express
– stand by for lift off!

From Thursday 5th September *New Computer Express* is an entirely different kind of a magazine.

Each week we'll be featuring a triple-format cover disk – Commodore Amiga, Atari ST and PC – packed to the very limit with demos of games and utility software, the choicest Public Domain and shareware and more.

Your newsagent will be pleased – nay, delighted – to reserve you a copy. See the form on page 58!

C64

- **Virtual Reality or just another rehash?**
- **At last! A User Group For *Geos* lovers**
- **Time travelling combat action in *Renegade***

VIRTUAL BANGWAGON

Casually browsing along the software shelves of my local WH Smith recently, an interesting compilation caught my eye; under the bold text *Virtual Reality* were four screenshots, including *Starglider 2* and *Stunt Car Racer*.

Starglider? *Stunt Car*? Surely these are 3-D games, *not* virtual reality? Then again, what *is* the difference? Incentive's new *Virtual Worlds* compilation springs to mind as well, but is the freescape genre really the closest thing to VR?

I'm quite worried about the prospect of an avalanche of 3-D game re-released under the tempting description of virtual reality, offering little more than just plain 3-D action.

The Incentive compilation is justified, I think, mainly because the games oozed atmosphere and the all important sensation of 'being there'.

What do you think? Is this just another opportunity to churn out old software? Drop me a line at the usual *Express* address, 30 Monmouth Street, Bath Avon BA1.

BAMBOOZLED?

Bombuzal is one of my favourite games at the moment, even if I do tend to tear my hair out every time I play. If you're in the same situation, why not try some of the following codes:

- BIKE
- SIGNEYES
- TAPELOCK
- PILLNOSE
- SINK
- SAFEBIRD
- SPOTHAIR
- VASEMYTH
- WORMPALM

THE GEOS GURU

Geos is one of those programs which never got the recognition it deserved; it's a fabulous Desktop Publishing (DTP) orientated package (originally bundled with the C64C) and there are countless additions available.

Outside of ICPUG (the Independent Commodore Products User Group) there has been very little support for it, until recently. The *Geos* User Group has been running for six months, under the editorial control of Mikey Barkhordar.

Each monthly issue comes on disk, and is absolutely stuffed to the hilt with clip-art, fonts and photo albums for use in *Geos* applications.

Mikey included some example art with the latest issue, and the quality is excellent (even if the printer let it down slightly). As well as the disk-based features, it represents the only method of contacting other *Geos* users to share ideas and graphics.

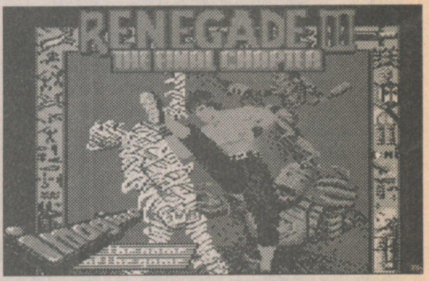
Each issue costs just £3.50, a veritable snip, and can be obtained from GUG (UK), 110 Deansway, Woodloes Park, Warwick CY34 5DQ. And the August issue should be available by the time you read this.

THE FINAL CHAPTER

The *Renegade* trilogy is quite an unusual success story, in fact, almost unique. The original game was an out-and-out beat-'em-up converted from the then stunning Taito coin-op, but the two sequels were developed in-house at Ocean.

Target Renegade saw our hero pitting his wits against Mr Big (who had captured his girlfriend) across five different sections.

Now it has happened again; you know the story – boy meets girl, boy falls in love with girl, girl gets captured by mysterious forces, boy goes off to rescue her, boy etc etc...



• *Renegade 3* is the final game in the trilogy, and ultimately the finest – one of the best re-releases this summer

The game is set across four different levels, or time zones to be more exact, and out hero must make his way to the right of the level (inadvertently killing anything in his path). On each level there are obstacles to avoid – lava, huge chasms, water and later on electric barriers – but thankfully there are upper and lower sections to walk on.

Zone one is the prehistoric era, and features egg-throwing goblins and huge dinosaurs, not to mention Captain Cavemaaaaaan!

Zone two is set in ancient Egypt, both inside and out of the pyramids. The adversaries here are particularly splendid, with superb mummies (and their little kiddies!) as well as Rameses' dog.

The third level has a medieval flavour, with the zone set alongside a castle (including a drawbridge which has to be lowered). Not content with flying

Capital North Ltd.

W E S

Present

A 16-Bit

COMPUTER EXHIBITION EXTRAVAGANZA

at the Leeds University Exhibition Centre, Calverley Street, Leeds 2.

Friday, 13th September, 10 a.m.-6 p.m.

Saturday, 14th September, 9 a.m.-8 p.m.

Sunday, 15th September, 10 a.m.-4 p.m.

BE SMART. BE THERE!

PLUS: Bring your spare computer equipment to sell at the Bring and Buy Counter. 10% Commission.

See the latest software & hardware Thousands of bargains.

★ Car parking for 1200 ★ Refreshments available ★

Stand Enquiries: Tel./Fax 0532 677657/610997

pigs (I kid you not), there are also aggressive court jesters and knights on hobby horses.

The final level is probably the best. It is set on a spaceship sometime in the future. All manner of droids and robots are out to stop you, along with the ubiquitous mutated alien life form.

Combat is very straightforward indeed; the joystick controls character movement, and the fighting moves are initiated when the fire button is pressed. Moves include punches/low punches, and jump kicks.

Weapons can also be collected to make life easier (however, this feature is only available on the first level).

Graphically *Renegade 3* is an absolute gem with colourful, varied and imaginative backdrops which utilise multicolour and hi-res characters to the maximum. The sprites in the game use hi-res overlays, and as a result the animation is a lot clearer (not to mention beautifully achieved). While the sound effects are fairly mundane, the music is some of Jon Dunn's best.

Gameplay tactics are very clever, with the need to constantly kill enemies to top up your rapidly diminishing energy evels. The upper/lower level system provides some interesting variety, even if he gameplay does become a little repetitive at times.

One of the better beat-'em-ups around, andundoubtedly the best of the *Renegade* trilogy, *Renegade 3* is on re-release now for £3.99.

Andrew Roberts

SPECTRUM

- **Bonus new game on Freescape compilation**
- **Ocean *is* back with the *Judgement Day* game**
- **Become an instant success at *Robo Attacki***

VIRTUAL COLLECTION

If you want to enjoy this dismal excuse for a summer I recommend you escape to a different world, or, indeed four different worlds, and by purchasing *Virtual Worlds* (Domark, £14.99), a much drooled over compilation of Incentive's truly superlative Freescape series.

Games in the package include:

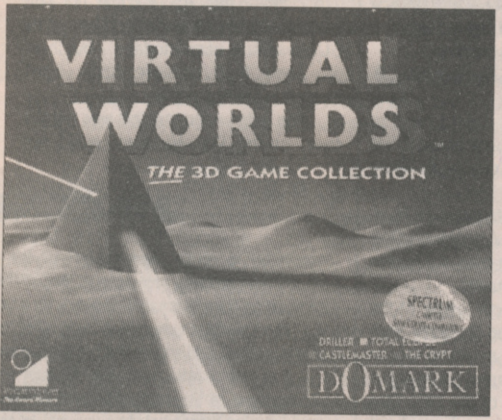
- *Total Eclipse*, an Egyptian flavoured quest inside a booby trapped pyramid.
- *Castle Master*, the smoothest and best-looking game of the series and more adventure oriented than *Total Eclipse*.
- The original *Driller* which was the first Freescape game and still very playable if slightly on the sluggish side.
- A previously unreleased (unless you're a member of the Home Computer Club) game called *The Crypt*.

This is by no means a freebie bonus but, in fact, a whole brand new Freescape adventure for you to enjoy in the confines of your MFI computer workstation.

The filled 3-D action takes place in a dark, underground labyrinth with some very slickly designed puzzles. The game plays like a true graphical adventure with traditionally fiendish text adventure puzzles placed in Incentives' delicately shaded and decidedly solid world.

As a stand alone game, *The Crypt* would be worth getting but alongside three Freescape compatriots (it would have been nice to see *Darkside* included as well) the package offers exemplary value for money. Explore Virtual Worlds today, man.

Incidentally, Freescape completists would do well to seek out the latest *Your Sinclair* for a neat little game created with *The 3-D Construction Kit*.



• **The *Virtual Worlds* compilation from Domark includes a game which only Home Computer Club members will have seen before, *The Crypt***

CHEAP DISKS

Supplier of hacks to this column, Alan Johns recently wrote in requesting rather than offering some help.

He remembers my epic quest for some 3-inch disks for my Plus Three recently and wants a quick recap of the cheap disk purveyors uncovered. No problem, Alan.

Publisher of countless Speccy adventures and value for money compilations, Zenobi Software, is also pretty good for diskettes.

Good quality CF-2 3-inch disks from cost £1.99 for 1-25, £1.89 for 25-100 and £1.85 for over 100. On top of that there's a postage and packaging charge of £1-

Continued on next page ➤

COMPUTER REPAIRS
AND UPGRADES

Access VISA

● COMMODORE ● ATARI ● AMSTRAD ● SINCLAIR ● IBM ●

- Commodore registered, Amstrad authorised
- Fixed prices on many machines.
- Most computers should be repaired 24hrs from booking in
- Over 3500 square foot engineering complex at your disposal
- First class technical advice available from over 20 technicians/engineers

Amiga 500	£44.95	➔ *(£25 additional premium if disk drive unit or keyboard are not repairable and require complete replacement)*
Atari 520 STFM	£15.00	➔ *Diagnostic fee plus quote (Typically £45.00)*
Commodore 64	£29.00	
Spectrum 48K	£21.00	
Spectrum +2	£29.00	
Spectrum +3	£35.00	
Spectrum 128K	£24.00	
Amstrad 464	£32.00	
Amstrad 6128	£36.00	
IBM/Clone	P.O.A.	
Other Machines	P.O.A.	

PREMIUM SERVICE

To utilise our premium service simply send or hand deliver your machine to our workshop address below, enclosing a fault description and daytime telephone number plus payment, and we will do the rest. Please add £5.00 if you require 24hr to your door courier or else contract parcel post will be used.

(W.T.S. reserve the right to refuse machines which are in our opinion beyond economic repair - Handling charge may be applicable)

TEL: 0582 491949 (4 lines)

W.T.S. ELECTRONICS LTD, Chaul End Lane, Luton, Beds., LU4 8EZ.

◀ £3. Very reasonable, as I'm sure you'll agree.

Contact Zenobi Software at 26 spotland Tops, Cutgate, Rochdale, Lancashire OL127 7NX.

Plus D, Disciple and Opus owners might be interested to know that 3.5-inch disks are priced at a very reasonable 65p each and tapes aren't exactly expensive either, ranging in price from 37p for a C15 to 60p for a C90. other than that, check out the advertisers in *Shopping Express* for bargain prices.

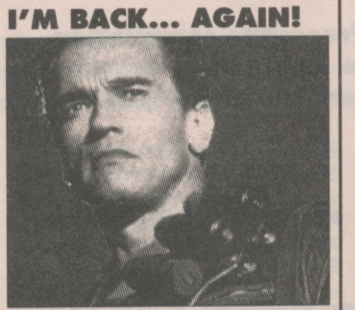
And while were dealing with queries. Leslie C Lee of Twickenham wants to know if the Prestel User Group is still in operation. He wrote to the group in April but hasn't received a reply yet. Write to me at the usual *Express* address

ROBOPOKE

Here's another poke from old faithful himself, Alan Johns. When does this man sleep? This time it's for *Robot Attack*, which is given away free with the Magnum lightgun. Make it work by simply typing it out, saving it for future use, running the appropriate game tape from the beginning. OK?

```
ROBOT ATTACK
10 REM ROBOT ATTACK (LIGHTGUN)
20 REM WRITTEN BY ALAN JOHNS
30 CLEAR 24999
40 LOAD "PAGER>COD"CODE
50 LOAD "SPRITES"CODE
60 POKE 37957,X: REM X=NUMBER OF
DROIDS TO KILL: REM CAN ALSO BE
USED AS A MULTIFACE POKE
70 RANDOMIZE USR 32768
```

I'M BACK... AGAIN!



• Ocean has picked up what must be the most lucrative licence of the year, *Terminator 2*

Arnold Schwarzenegger doesn't need to keep telling us he'll be back because on our computer at least he's rarely away longer than a few minutes.

The latest Arnie extravaganza is, of course, *Terminator 2 Judgement Day*, the most expensive film ever made and this year's hyped blockbuster.

Mind you, the Speccy game of the film looks like it's coming on pretty well. Latest reports suggest a typical Ocean film conversion with different game styles relating to various bits of the plot. Like *Robocop* the beat-'em-up and car chase action will be interspersed with maddening puzzle sections.

Robin Alway

MACINTOSH

- **Microsoft claims Apple is the copycat**
- **Printing in style with new bubblejet software**
- ***QuickDex 2.0*: the future of address books?**

WHO'S COPYING WHO?

Yet more in the Apple versus Microsoft and Hewlett-Packard débacle.

It seems that the judge in charge of the case, one Vaughn Walker, has changed his mind somewhat. Microsoft had claimed that Apple could not sue anyone else over the 'look and feel' of its GUI (graphical user interface – but then, you knew that) because Apple didn't invent it in the first place.

The judge ruled that this was not the case, saying that Microsoft could not raise the issue of whether the programs were original or not. But now, just as a trial was looking likely (see Mac columns *passim*) Judge Walker has stated that he will now hear Microsoft's complaint that Apple's Mac interface was not, in fact, originated by Apple.

But, says the legal one, Microsoft must show that the bits of the interface which Microsoft claims were designed by someone else have actually been, "directly copied from prior works." So if Apple's user interface is not a direct copy

MACS IN SPACE!

According to on-line service NewsBytes, astronauts on the latest Atlantis space shuttle were wearing something called 'WristMacs', small digital watches which upload information from Macs and display it on a two-line display.

The WristMac can upload up to 80 of these two-line 'pages', and comes in a range of styles. Only available in the States at present, prices range from $149 to $249.

The astronauts used the devices as alarms to remind them when to take photographs of the earth. At the right time the alarm would go off and the display would remind them what they were supposed to be photographing.

Wouldn't a Casio 99p digital watch and a notebook would be just as effective...?

☎ Call the manufacturer, Ex Machina Inc, on 010 1 212 831 3141

✳ SUPER SUMMER SAVERS ✳
NEW AMIGA PD
ONLY £1.25 PER DISK

LOWEST PRICES

AMAZING DEALS

BULK BUYERS
2 FOR 1 DISK GUARANTEE

50	3.5" DS/DD	£21.75
100	3.5" DS/DD	£33.00
150	3.5" DS/DD	£49.00
200	3.5" DS/DD	£62.00
400	3.5" DS/DD	£122.00
500	3.5" DS/DD	£139.00

1000+ Call for latest prices
Prices include VAT/P+P

DISKS & BOXES
2 FOR 1 DISK GUARANTEE

50	3.5" DS/DD + 80 box	£24.50
100	3.5" DS/DD + 80 box	£36.00
150	3.5" DS/DD + 80 box	£52.50
200	3.5" DS/DD + 2 x 80 boxes	£66.00
400	3.5" DS/DD + 4 x 80 boxes	£136.00
500	3.5" DS/DD + 5 x 80 boxes	£156.00

Prices include VAT/P+P

5.25" DISK BOXES

50 Cap	£5.10
100 Cap	£5.90

3.5" DISK BOXES

40 Cap	£4.10
80 Cap	£4.50
60 Cap stackable	£10.00
150 Cap Posso	£15.50

SONY BRANDED 3.5" DS/DD

10	3.5" DS/DD	£6.50
50	3.5" DS/DD	£32.00
100	3.5" DS/DD	£64.00

Add £3.65 P+P

TDK BRANDED 3.5" DS/HD

10	3.5" DS/HD	£11.00
20	3.5" DS/HD	£21.50
50	3.5" DS/HD	£50.00

Add £3.65 P+P

GENUINE SONY BULK

50	3.5" DS/DD	£22.00
100	3.5" DS/DD	£40.00
200	3.5" DS/DD	£78.00
500	3.5" DS/DD	£162.00

Prices include VAT/P+P

AMIGA PD

A523 Amiga Tank (P.D game)
A521 Tricky (P.D game)
A520 Petersquest (game)
A519 Spacewars (game)
A517 Downhill Skiing
A516 Headgames (P.D game)
A515 Mental Image Games Disk
A473 RAF Music Tools
A472 Popeye Demo
A453 Arcade Action Games Disk
A452 The Simpsons Slideshow
A441 Simpson Demo by Decay
A425 Amos Demo
A411 Return to Earth Game
A396 Vision Megademo 2
A373 Talking Colouring Book
A367 Addams Family Demo
A357 Yaba-Daba Demo
A277 Vison House
A268 Fillet The Fish Demo
A245 Flashbier (P.D. Game)
A239 Porky Pig Demo
A230 17 Bit Sonix
A207 Drip (P.D. Game)
A192 Miami Vice Demo
A169 Jazzbench
A132 Rebels Megademo
A127 Robocop Demo
A116 UEdit 2.3
A110 Amiga Charts 5

5.25" DS/HD 21p EACH

50	5.25" DS/DD	£10.25
100	5.25" DS/DD	£20.00
500	5.25" DS/DD	£98.00
1000	5.25" DS/DD	£190.00

Add £3.65 P+P

3.5" DS/HD 63p EACH

50	3.5" DS/DD	£30.00
100	3.5" DS/DD	£58.00
200	3.5" DS/DD	£114.00
500	3.5" DS/DD	£280.00

Please add £3.65 P+P

DAATASCAN PROFESSIONAL..........£149

PHILIPS CM8833 MKII MONITOR £205

AMIGA REPLACEMENT MOUSE £14

STAR LC-200 PRINTER £205

5.25" DS/DD 39p EACH

50	5.25" DS/HD	£19.00
100	5.25" DS/HD	£37.00
200	5.25" DS/HD	£67.00
500	5.25" DS/HD	£165.00

Add £3.65 P+P

AMIGA SPECIALS

A500	£299
Cartoon Classic Pack	£355
Amiga 1500	£650
Screen Gems 1Mb	£355
Class of the 90's	£460
First Steps	£460
Amiga 1500 +1084S monitor	£895
Tenstar Games Pack	£30

JOYSTICKS

Quickshot Turbo III	£7.50
Cheetah 125+	£7.50
Zipstick	£11.50
Jetfighter	£12.50

AMIGA ACCESSORIES

Cumana Drive	£60.00
½mb + clock	£30.00
½mb no clock	£27.00
A590 hard drive	£290.00
A590 Hard drive + 2Mb RAM	£380.00
Star LC10 Ribbon	£3.65
Colour Ribbon	£6.00
4-Play games adaptor	£5.00
1000 Tractor Labels	£10.00
Printer Lead	£8.00
1000 labels	£8.00
Port ext. Lead	£5.00
Joystick ext. lead	£5.00
Mouse Mat	£2.75

Telephone:- 0273 506269/0831 279084

Call or send cheques/postal orders to: BCS Ltd, 349 Ditchling Road, Brighton East Sussex BN1 6JJ
Add £3.65 P+P or £4.00 for 3 day delivery or £10 P+P for next day delivery. Cheques will be held for clearance. All orders subject to availability, E & OE.

of an earlier work, Microsoft loses this round. This one will run and run.

SOFTWARE STYLE

Apple has announced that the software drivers for its £300 bubblejet printer the StyleWriter is to be upgraded.

The new software allows users to print documents in the background, as is possible now on its laser printers using *Print Monitor* running under *MultiFinder* (or in System 7). The lack of this feature has been the main complaint about the StyleWriter; because it is fairly slow, users have been irritated that they couldn't use their machines for anything else while the printer was operating.

The StyleWriter will also come with four new TrueType fonts, Chicago, Geneva, Monaco and New York, which have never been available as PostScript fonts before.

The company has also announced software which it claims will double the performance of the £800 Personal LaserWriter LS. The new version of that machine will also be shipped with a larger paper tray and the four new fonts.

The software should be shipping now, and you'll get it from AppleCentres, user groups and some bulletin boards. There is no charge for the upgraded software, though some user groups and dealers may charge duplication costs.

DIAL-A-FONT

If you find that you need a specific font but you can't afford to wait while one is shipped from a font dealer, you could do worse than check out the new Monotype Typeface Library on CD-ROM.

Using a technique already pioneered by Agfa, all the fonts on the CD-ROM are 'locked'; if you want to use a particular typeface you phone up Monotype, give your credit card number and in turn receive a password which, when typed in to a special application, allows you to access the font.

Over 1,400 of the fonts from highly-regarded Monotype PostScript typeface library are contained on the CD, along with faces licensed from The Font Bureau and the Adobe Type Library.

The CD-ROM comes in two versions: the Standard Package costs £99, and allows purchasers to unlock 12 fonts from a restricted selection free of charge. The Premier Package for £899 includes an Apple CD-ROM drive and allows the purchaser to unlock any 20 fonts free of charge.

☎ The Monotype Typeface Library on CD-ROM is available now direct from Monotype on 0737 765959.

QUICKDEX II

Users of the famous *QuickDEX* database-come-address-book will be pleased to hear that Cassady and Greene has now released *QuickDEX II*, which cures the main problem of the original – that it could only hold a small amount of information per 'card'.

Version two of the program includes scroll bars, so as much data as you want can be entered on each card. It also has many minor improvements, such as the ability to set your preferred font and size for display of the information.

If you're looking for a flat file database in the form of a DA which can be used for anything from an address book upwards, check out *QuickDEX II*.

☎.The program costs £45 and is available from Softline on 081-642 4242.

Ian Wrigley

POSTCARD FROM AMERICA

The 'news' that Apple would offer a ROM upgrade in October spread around the electronic services faster than a bad credit rating. Lamentably, this report surfaces every six months to send power-users salivating.

Ever since the release of System 7, Mac owners have been ROM conscious. Macintosh II models with 32-bit 'clean' ROMs (IIci, IIfx, and IIsi) can now access up to 1 gigabyte of executable RAM. This is a combination of physical memory and virtual disk-based memory, since the chip RAM limit is really 128Mb from the way the SIMMs (Single In-line Memory Module) are wired.

The other 68030-flavoured models have 'dirty' ROMs that limit the capability to address more than 8Mb physical, and 14 virtual. Petitions have been circulated asking Apple to provide clean ROMs for these machines. It wouldn't be too difficult a job, since the ROMs are on a replaceable memory module.

Apple has been in the freezer on this plan. It is worried that the old ROM chips would find their way into emulators, or clones. The venerable software patch looks to be the current solution to work around the problems. Connectix' MODE32 software utility already lets the dirty machines take full advantage of System 7's memory management capabilities. It is a righteous hack, but software patches (from third-party developers, or Apple) can only do so much, before their performance and reliability are compromised.

The intriguing side of the recent rumour is that the ROM upgrade will utilise Flash-RAM, a type of read-write memory. Programs on floppy disks would install updated ROM code, just like system software. The down-side of this feature is that viruses might be written to attack ROMs, instead of just applications and files on external disks. Anti-viral programs will have to work overtime to keep things clean inside and out.

BMUG rumour wizards claim that the information is correct, but the timeline is off – expect the upgrade in the Spring.

David Morgenstern

BORED WITH YOUR OLD AMIGA GAMES?

Then why not swap them for something new!

Just send us a list of your old/completed games and tell us what games you would like in exchange. We do the rest! For our small fee your software collection can have a new lease of life! Ring us for further details.

Swift
EXCHANGE

Tel: 0322 288483

40 Bow Arrow Lane, Dartford, Kent DA2 6PA

ATARI

ST Accessories

SM124 Mono Monitor	£129.00
External 3.5" Disk Drive	£69.00
Golden Image Hand Scanner	£169.00
Forget-Me-Clock II	£19.95
ST Monitor Switch Box	£14.95
STE Stereo scart lead	£12.99
STFM scart lead	£12.99
STE Stereo MKII 8833 lead	£12.99
STFM MKII 8833 lead	£12.99
Joystick/Mouse extension lead	£4.99
Replacement Mouse lead	£3.95
Standard Parallel lead	£5.95
Mouse Mat	£3.50
Squick replacement mouse	£14.99

Protar Hard Drives

We are now *official stockists* of the latest in high quality / low price ST hard disk drives from Protar. All Protar hard disk drives come with a full 12 month REPLACEMENT warranty (no lengthy repairs!!), a DMA through port, device number switching and superb disk management software.

★ NEW LOW PRICES ★

★ STE COMPATIBLE ★

Progate 20Mb Hard Disk	£279.00
Progate 40Mb Hard Disk	£341.00
Progate 40Mb with Cache	£423.00
Progate 44Mb Removable	£611.00
Progate 60Mb Hard Disk	£437.00
Progate 60Mb Tape Streamer	£581.00
Progate 80Mb Hard Disk	£486.00
Progate 80Mb with Cache	£565.00
Progate 150Mb Tape Streamer	£793.00
Progate 160Mb with Cache	£922.00
Progate 440Mb with Cache	£1588.00

STE Ram Kits

DIY 1 - 512k upgrade	£29.99
DIY 2 - 2mb upgrade	£89.00
DIY 4 - 4mb upgrade	£159.00

All STE Ram Kits come with instructions and DO NOT require soldering in most machines.

8833 MKII

Colour Monitor

The Philips 8833 MkII is the perfect colour monitor for ST and Amiga owners. With its stereo sound and super quality picture it really shows off the full capabilities of the STE and the Amiga. The Philips 8833 MkII also comes with 12 months on site warranty FREE!

8833 with STFM cable	£249.99
8833 with STE cable	£249.99
8833 with Amiga cable	£249.99

Or even better ....

The new VISTO colour monitor. The VISTO C14M, made under official UK licence from Philips themselves, is identical in every respect to the Philips 8833 MkII including all inputs and outputs. But, VISTO have enhanced the looks of the monitor by replacing the case with a new upgraded better looking version. The VISTO C14M has a no quibble 12 month replacement warranty and comes free with cables for all Amigas and all Atari STs.

VISTO C14M £248.00

PRINTERS

ACCESSORIES & RIBBONS

All of our printers come with a parallel cable to suit Atari ST, Amiga and all standard PC etc (other cables available at extra cost - ask for details). All printers carry a full 12 months warranty. We only sell genuine UK stock - we do not offer inferior "grey imports".

CITIZEN

• 2 YEAR WARRANTY •

EXTENDED SPECIAL OFFER! *Due to the massive response to our FREE colour kit offer, we have decided to extend the offer so all Citizen Swift 9,24 and 24X printers will continue to come with a FREE colour kit and colour ribbon until stocks last.*

SPECIAL OFFER! *For a limited period only we are offering a CITIZEN PRINTER STARTER PACK with all Citizen printers. The pack comprises of : 3.5" disk full of printer drivers for the ST, Amiga & PC; 200 sheets of fanfold tractor feed paper; 200 fanfold tractor feed address labels; 5 tractor feed envelopes all for only £12.99 on top of the price of the printer*

Citizen 120D + *(9-pin, 144 cps draft, 30 cps NLQ)*	£139.00
★ Citizen Swift 9 *(9-pin, 192 cps draft, 48 cps NLQ)*	£199.00
Citizen 124D *(24-pin, 144 cps draft, 48 cps LQ)*	£209.00
★ Citizen Swift 24 *(24-pin, 192 cps draft, 64 cps LQ)*	£299.00
★ Citizen Swift 24X *(24-pin, 15" carriage)*	£399.00

** Denotes FREE COLOUR UPGRADE KIT*

star

Star LC10 Mono *(9-pin, 144 cps draft, 34 cps NLQ)*	£155.00
Star LC200 Colour *(9-pin, 180 cps draft, 45 cps NLQ)*	£220.00
Star LC24-10 Mono *(24-pin, 180 cps draft, 60 cps LQ)*	£215.00
Star LC24-200 Mono *(24-pin, 200 cps draft, 67 cps LQ)*	£260.00
Star LC24-200 Colour *(24-pin, 200 cps draft, 67 cps LQ)*	£295.00
Star XB24-10 Mono *(24-pin Professional Series)*	£475.00
Star XB24-15 Mono *(24-pin 15" version of XB24-10)*	£600.00

Other Printers .....

Canon BJ10E Bubble Jet *(ink jet, portable and compact)*	£289.00
Hewlett Packard DeskJet 500 *(ink jet, 3 pages per minute)*	£399.00
Panasonic KXP 1124i *(24-pin, improved version of KXP 1124)*	£279.00

PHONE OR VISIT US TODAY FOR THE BEST PRICES FOR PRINTER RIBBONS AND ACCESSORIES ETC

LASER PRINTERS & PLOTTERS AVAILABLE ON REQUEST – PLEASE RING US WITH YOUR REQUIREMENTS

ATARI LYNX

The Atari Lynx is a superb full colour, hand held, games console using plug-in cartridge games. The Lynx can be used with either batteries or a mains power supply unit. All our Lynx machines come with instructions and are availabe with or without mains power supply unit and comlynx cable.

Lynx Console Only	£79.99
Lynx + PSU	£84.99
Lynx + PSU + Comlynx	£89.99

Carrying Case	£14.99
Carrying Pouch	£11.99
Car Power Adaptor	£9.50
Sun Visor/Scratch Shield	£6.99
Mains Power Supply	£14.99
Comlynx Cable	£7.99

GAME CARDS

Blue Lightning	£19.99
Chips Challenge	£19.99
Electrocop	£19.99
Gates of Zendocon	£19.99
Gauntlet 3	£19.99
Klax	£19.99
Miss Pacman	£19.99
Rampage	£19.99
Road Blasters	£19.99
Robo Squash	£19.99
Rygar	£19.99
Shanghai	£19.99
Slime World	£19.99
Xenophobe	£19.99
Zarlor Mercenary	£19.99
War Birds ★NEW★	£23.99
Paperboy	£23.99
California Games	£23.99
Block Out ★NEW★	£23.99
Ultimate Chess ★NEW★	£27.99

AMIGA

Accessories

Protar 512K ram upgrade + clock	£29.99
A501 512K ram upgrade + clock	£39.99
A500 1.5Mb ram upgrade	£99.99
A590 20Mb hard disk drive	£284.95
External 3.5" Disk Drive	£65.00
Squick replacement mouse	£14.99
Golden Image Hand Scanner	£169.00
Amiga Stereo Scart Lead	£12.99
Amiga 8833 MkII Lead	£12.99
Mouse Mat	£3.50

512K Ram Upgrade with Clock

We are now stocking the new PROTAR 512K RAM UPGRADE WITH CLOCK. The neat, compact 4 chip design comes complete with box, instructions, on/off switch and a full 12 month warranty.

PROTAR 512K Ram with clock £29.99

We also have limited stocks of the genuine Commodore A501 512K Ram Expansion, which we are offering at the ultra low price of :

A501 512K Ram with clock £39.99

Please specify which 512K ram upgrade (either Protar or Commodore) when ordering from us.

NEW Protar Amiga Hard Drives

At last ... high quality hard disk drives for the Amiga A500. The new PROTAR range of A500 hard disks are here ... and just look at the specifications ..

- **Perfect fitting to the A500**
- **Colour matched to the A500**
- **5 times faster than the A590**
- **8MB internal ram expansion facility**
- **1 year REPLACEMENT warranty**
- **2 year warranty of Cache versions**
- **Auto parking & auto booting**
- **Seperate PSU supplied**
- **Sub 24 millisecond access time**
- **Hard disk management software**

Progate 20Mb Hard Disk	£279.00
Progate 30Mb Hard Disk	£349.00
Progate 50Mb Hard Disk	£429.00
Progate 50Mb with Cache	£529.00
Progate 60Mb Hard Disk	£542.00
Progate 80Mb Hard Disk	£599.00
Progate 100Mb with Cache	£639.00
Progate 160Mb with Cache	£939.00

BEST PRICES

MAIL ORDER HOTLINE

(0903) 700714

10AM to 12MIDNIGHT

7 DAYS A WEEK

TELESALES LINES OPEN 10AM TILL 12MIDNIGHT – 7 DAYS A WEEK – 0903 700714

ATARI STE PACKS

ALL ATARI ST PRICES INCLUDE VAT AND UK DELIVERY. ALL PRODUCTS CARRY A FULL 12 MONTH WARRANTY. PLEASE RING US BEFORE ORDERING TO CHECK STOCKS AND CURRENT PRICES.	***512k***	***1mb***	***2mb***	***4mb***
ATARI STE STANDARD PACK. consists of the computer with mouse, tv lead, manual and all connecting leads etc. The Standard Pack is supplied with NO software.	**£289.00**	**£319.00**	**£349.00**	**£429.00**
ATARI STE DISCOVERY 1. consists of the Standard Pack and STOS, First Basic, NeoChrome and 4 games (Carrier Command, Space Harrier, Outrun, Bomb Jack)	**£299.00**	**£329.00**	**£359.00**	**£439.00**
ATARI STE DISCOVERY 2. consists of the Standard Pack and First Basic, ST Tour, NeoChrome and 4 games (Dragons Breath, Super Cycle, Indiana Jones, Anarchy)	**£299.00**	**£329.00**	**£359.00**	**£439.00**
ATARI STE TURBO. consists of Standard Pack and STOS, Hyperpaint II, Music Maker II, First Basic and 8 games (Indiana Jones, Dragons Breath, Blood Money, Impossible Mission II, HKM, Anarchy, Outrun and Supercycle).	**£309.00**	**£339.00**	**£369.00**	**£449.00**
ATARI STE TENSTAR. consists of Standard Pack and Asterix, Chess Player 2150, Drivin Force, Live + Let Die, Onslaught, Pipemania, Rick Dangerous, Rock n Roll, Skweek and Trivial Pursuit II.	**£309.00**	**£339.00**	**£369.00**	**£449.00**
ATARI STE POWER. consists of Standard Pack and also 20 top selling arcade games. Due to lack of space, it is not possible to list the games. Please phone for details.	**£309.00**	**£339.00**	**£369.00**	**£449.00**
ATARI STE KUMA BUSINESS. consists of Standard Pack and word processor K-Word 2 (incl. K-Spell Checker), K-Database, K-Spreadsheet, K-Graph business graphics and Metacomco Basic language.	**£319.00**	**£349.00**	**£379.00**	**£459.00**
ATARI STE CURRICULUM. consists of Standard Pack and 3 levels of educational software (from 5 yrs to 50 yrs !!), a word processor, database, spreadsheet, Hyper Paint II and Music Maker II.	Not Available	**£369.00**	**£399.00**	**£479.00**

AMIGA PACKS

ALL AMIGA PRICES INCLUDE VAT AND UK DELIVERY. ALL PRODUCTS ARE UK STOCK AND CARRY A FULL 12 MONTH COMMODORE WARRANTY. PLEASE RING US BEFORE ORDERING TO CHECK STOCKS AND CURRENT PRICES.

AMIGA A500 BASE A500 computer, mouse, tv modulator, manuals, Workbench, etc supplied 'bare' with no games software * STOCKS VERY LIMITED - SO HURRY *	**£299.00**
AMIGA A500 BASE 1MB A500 computer with extra 512K ram expansion, mouse, tv modulator, manuals, Workbench, etc supplied 'bare' with no games software. * OUR RAM EXPANSIONS *DO NOT* INVALIDATE YOUR WARRANTY *	**£325.00**
AMIGA A500 ASTRA A500 512k computer, mouse, tv modulator, manuals, Workbench, etc supplied with 10 great software titles (see A500 1MB ASTRA pack below for details)	**£325.00**
AMIGA A500 1MB ASTRA Amiga A500 computer, 512K Ram expansion with clock and battery back-up, mouse, tv modulator, manuals, Workbench etc disks, plus the ASTRA 10 games pack including the following games : Datastorm, Dungeon Quest, E Motion, Grand Monster Slam, Kid Gloves, Powerplay, RVF Honda, Shuffle Puck Cafe, Soccer and Tower of Babel	**£350.00**
☆NEW☆ ***AMIGA A500 1MB CARTOON CLASSICS*** Amiga A500 computer, 512K Ram expansion with clock and battery back-up, mouse, tv modulator, manuals, Workbench etc disks, plus the following top selling software titles : Lemmings, The Simpsons, Captain Planet and Deluxe Paint 3	**£359.00**
AMIGA A1500 BASE A1500 computer with 1MB ram, detachable keyboard, 2 x 3.5" 880k disk drives built in, mouse and all manuals. Accepts all A2000 peripherals etc. The A1500 base pack is supplied with no software other than Workbench. Please note : the A1500 does not have a modulator.	**£599.00**
AMIGA A1500 SOFTWARE consists of the A1500 Base Pack and the following great software Platinum Works, D Paint 3, Populous, Simm City, Battle Chess, Their Finest Hour (Battle of Britain) and 2 books - A-Z of Computer Jargon and Getting the most from your Amiga.	**£655.00**

PLEASE NOTE - ALL OF OUR PRICES INCLUDE VAT AND DELIVERY !!

IF YOU WISH TO ORDER WITH US, THEN PLEASE SEND YOUR CHEQUES, BANKERS DRAFTS, POSTAL ORDERS, CASH ETC TO OUR MAIL ORDER ADDRESS OR RING OUR MAIL ORDER HOTLINE ANY TIME BETWEEN 10.00AM AND 12 MIDNIGHT, 7 DAYS A WEEK, AND USE YOUR ACCESS OR VISA CARDS. OR ALTERNATIVELY PAY A VISIT TO OUR SHOP, CHIPS COMPUTER CENTRE, AND SEE OUR WIDE RANGE OF COMPUTER GOODS AND SOFTWARE.

SHOWROOM

CHIPS COMPUTER CENTRE, 53 RUGBY ROAD,
WORTHING, WEST SUSSEX, BN11 5NB.
TEL : (0903) 700804.

OPENING : MON TO FRI 10AM TO 6PM. SAT 9.30AM TO 5.30PM
FINANCE / CREDIT FACILITIES.
PART EXCHANGE CONSIDERED. NEW AND USED EQUIPMENT
ATARI STE, AMIGA AND PC COMPATIBLES ON DISPLAY.
ALL TYPES OF SOFTWARE (BUSINESS / LESUIRE).
REPAIRS UNDERTAKEN. TRAINING. INSTALLATION. ON-SITE WARRANTIES.

MAIL ORDER

BEST PRICES (DEPT NCE), 53 RUGBY ROAD,
WORTHING, WEST SUSSEX, BN11 5NB.
TEL : (0903) 700714.

OPENING : 7 DAYS A WEEK 10AM TO 12 MIDNIGHT
ALL PRICES INCLUDE 17.5% VAT AND FREE DELIVERY (AVERAGE 4 - 5 DAYS).
PLEASE ADD £7.00 FOR NEXT WEEKDAY DELIVERY.
GOODS USUALLY SENT OUT THE SAME DAY WHEN
CLEARED PAYMENT IS RECEIVED BEFORE 2PM.
PERSONAL CHEQUES REQUIRE 7 DAY CLEARANCE.

All prices include 17.5% VAT and free UK delivery unless stated otherwise. All prices / specifications / special offers subject to change without notice.

BEST PRICES MAIL ORDER - OUR TELESALES LINES ARE OPEN FROM 10.00AM TILL 12 MIDNIGHT - 7 DAYS A WEEK !!!

WHOLE WIRED WORLD

Sega gets precious over its logo; Commodore lays off Compuserve staff, Lynx users get their own magazine, a new text editor is lounched for the Atari and there's worrying news from Germany on DOS viruses. Steve Gold reports...

SEGA GETS HEAVY OVER COPYRIGHTS

Sega Enterprises has taken legal action against Razorsoft International and Punk Development in the US. Why? The games giant is accusing the pair of companies of unauthorised use of its trademarks.

Specifically, Sega is after the two companies for alleged copyright infringement, alleged breach of contract and agreements, as well as alleged misappropriation of intellectual property, conspiracy and fraud.

In a statement from its San Francisco offices, Sega general counsel Kiichi Nishikura said that the law suits were necessary 'to protect the strong brand identification and equity that we have developed in the Sega and Sega Genesis trademarks'.

In plain english, Sega is not happy with the use of its games logo on compatible software and hardware. So unhappy, in fact, that its taking legal action.

The move may mean a lack of third-party Sega goodies available in the marketplace in the coming months, which is a shame.

• The Sega logo – no longer to be seen on third party Sega goodies?

ATARI SALES SLUMP

Atari has reported net profits of $30.4 million on sales of $49.2 million in the second quarter whihc ended 30 June 1991. The figures compare with profits of $1.5 million on sales of $84.9 million for the same quarter last year.

The company is blaming its transition to sub-contractors for machine production as the primary cause of the sales slump. Other factors affecting sales are the poor economic conditions in Europe, Atari claims.

This still doesn't explain why Atari only has a few dealers in the US stocking its products, while in Europe, it's still impossible to buy a portable ST (Stacy) from anywhere. Perhaps this is the poor economic conditions that Atari is talking about?

COMPUSERVE MANAGER LAID OFF

Commodore has had an on-line forum, a special interest group, on Compuserve for several years now. The forum has been managed for the past few years by Dave Minnich. Minnich has now been laid off by Commodore.

Commodore is staying very quiet on why Minnich has been laid off, but no replacement has been appointed. It's worth noting that Commodore US has laid off several engineering and research and development staff in recent weeks.

Perhaps the most worrying rumour is that the company's Amiga Unix division has been closed down. This is only a rumour, but watch this space.

AUTHORING SYSTEM FOR THE AMIGA

Minneapolis-based company has unveiled Foundation, a personal software authoring system for the Commodore Amiga.

According to Impulse, Foundation is an expert system for end users that enables them to create applications and interactive presentations without the need for programming knowledge.

All this sounds like a package for the PC called The Last One, a program that generates programs, which was released in the mid-1980s to critical acclaim. TLO, however, was quite primitive, so is Foundation better?

According to Impulse, best-known in the Amiga community for its *Imagine 3-D* animation software and The FireCracker, a 24-bit real time graphics display card, Impulse is a state of the art program authoring system.

As with previous goodies from the company, Impulse looks good value at $250. Impulse can be contacted on 0101-83-800-328-0184.

MAGAZINE FOR LYNZ USERS

Several new magazines have been launched in the UK in the past few weeks. This week is no exception – E&M Publishing has announced a new magazine called *On Target* that is aimed exclusively at Atari Lynx owners.

According to the publishers, the new bi-monthly will cover the world of the Lynx from software to accessories right down to secret playing hints.

Unusually for a US-produced magazine, *On Target* is being pitched at the worldwide Lynx marketplace. Subscribers to the magazine are being invited to `Lynx up' with each other.

A sample issue of *On Target* costs $1. Note that these prices are US only, and a small surcharge may be payable for UK subscriptions.

Contact: *On Target*, 18C Boyle Avenue, Cumberland, RI 02864-2306, United States. Tel: 0101-401-658-3917

SUDDEN TEXT EDITOR FOR ATARI ST

Sudden Incorporated has released its first package for the Atari ST. Called *Sudden View*, the $69-95 package is a text editor for the ST which Rod Coleman, programmer and president of the company, claims is revolutionary in its approach to word processing.

According to Coleman, *Sudden View's* most obvious feature is its ability to dynamically scroll text and move text blocks. These functions take place in real time and in direct response to the user's movements.

Another feature of *Sudden View* is its auto-indexing facility. All text within the file editor is indexed in memory, meaning that the user can `jump' to any other part of the file instantly, no matter how long it is.

Sudden View has no insert or replace modes. Editing is carried out by placing the cursor over a section. If the cursor is over a space, it will insert. If it is over text, it will replace.

The package sounds good. Perhaps this is why it is generating so much interest in the on-line Atari community.

For more information, contact: Rod Coleman, Sudden Incorporated, 5081 South McCarran Boulevard, Reno,Nevada, 89502, United States. Tel: 0101-702-827-2996

1,000 DOS VIRUSES

Computer experts have underestimated the growth in virus programs on the PC, according to Dr Klaus Brunnstein, a professor at the University of Hamburg, Germany. Brunnstein is a recognized international expert on virus programs.

According to estimates made at the end of last year, the 1,000th DOS virus program is expected by the end of this year. According to Brumstein, however, that figure was passed earlier this year.

In his recently published *Index of Known Malicious Software: MS-Dos Systems,* Brunnstein lists no less that 998 virus programs.

Commenting to an Internet audience that he was `deeply depressed' by the continued growth of virus programs, Brunnstein said that anti-virus experts must improve their co-operation if the problem is to be effectively handled.

If experts do not co-operate in their investigation, he said, then DOS virus programs will proliferate. ■

SONY'S COMPUTER CONTROLLED VCR

• It's goodbye to frame jitters. The Vdeck VCR integrates Vbox technology for Sony's 8mm VCRs

Controlling a VCR while editing from a portable video camera is never easy – usually, frame jitter and all manner of problems make the results look unprofessional.

Earlier this year, Sony released its video black box, the Vbox, an interface unit that sits between a computer and a VCR so that the recorded image is second to none. Now Sony has integrated the technology within its 8mm range of VCRs.

Shown for the first time at the Mac Expo show in early August, the Hi8 computer video drive is expected to ship by the end of the year.

So what's so hot about Sony's Vdeck VCR? Quite a lot according to Sony. For starters, the unit is controlled through the computer's serial port using a video control protocol called VISCA – short for Video System Control Architecture.

Until now, the computer attached to a Vbox controller, which was attached to the VCR. Now, with the Vdeck, these functions are integrated in one unit.

The Sony Vdeck also supports RC Time Code, a frame identifier system that enables rapid and accurate location of single video frames on the 8mm tape.

Several software houses, notably producing packages for the Apple Mac, are currently working on software for the Vdeck system. Sony, meanwhile, is discussing licensing terms for the technology with other VCR manufacturers. The Vdeck will be available in the US towards the end of the year with a price tag of $2,000.

Evesham Micros

All our prices include VAT at 17.5% and Delivery

AMIGA
SPECIAL DEALS

VIDI-Amiga video digitiser	£ 110.00
VIDI-Chrome-Amiga colour splitter	£ 16.95
VIDI-RGB colour input splitter	£ 64.95
RocGEN Genlock Adapter	£ 114.99
MiniGEN Genlock Adapter	£ 95.00
CBM A590 20Mb Hard Disk	£ 279.00
A590 512K RAM Upgrade	£ 29.95
A590 1MB RAM Upgrade	£ 59.95
A590 2MB RAM Upgrade	£ 99.95
A500 Replacement PSU	£ 39.95
A500 Replacement internal 3.5" Drive	£ 49.95
KCS Powerboard PC Emulator	£ 229.99
Amiga Virus Protector	£ 9.95
Stereo Sound Sampler inc. s/ware	£ 29.95
MIDI Interface	£ 19.95
Golden Image Handy Scanner	£ 145.00
Kickstart 1.3 Upgrade	£ 29.95

Buy an Amiga Feature Pack From Evesham Micros AND YOU ALSO GET ....

THESE *FABULOUS* GAMES:

Tracksuit Manager '90 • Subbuteo • Diskman • Jungle Book • Diet Riot • Lost'N Maze • Battle Squadron • Asterix • Block Alanche • Tank Battle • Treasure Trap • Nigel Mansell

PLUS! A wordprocessor and spreadsheet

N.B. *Not* supplied with A500 'Base Pack' offers

NEW! AMIGA 500 1MB CARTOON CLASSICS PACK

Incredible Value !!! Includes **LEMMINGS, BART SIMPSON vs THE SPACE MUTANTS, CAPTAIN PLANET and DELUXE PAINT III**

ONLY £369.99

Cartoon Classics plus 3.5" External Drive ... £419.99

A500 COMPUTER BASE PACK

Amiga A500 Base Package	£ 307.49
Amiga A500 Base Package with 512K RAM/Clock Upgrade	£ 333.99
Amiga A500 Base Package *plus* External 3½" Drive	£ 357.49
Amiga A500 Base Package *plus* External 3½" Drive *and* 512K RAM/Clock Upgrade fitted	£ 383.99

N.B. *Does not include extra games software.*

A500 1MB Screen Gems Pack	£ 369.99
A500 1MB Screen Gems Pack *plus* 3½" Ext.drive	£ 419.99
CLASS OF THE 90's Package	£ 499.00
CLASS OF THE 90's Package *plus* 3½" Ext.Drive	£ 549.00
Amiga 1500 Starter Pack	£ 949.00

ATARI®

'KICK OFF' with GAZZA at Evesham Micros !

EVESHAM MICROS PRICE PROMISE - WE WILL *BEAT* ANY GENUINE ATARI ST PACKAGE OFFER ON A LIKE-FOR-LIKE BASIS

FREE! With EVERY ST Pack

★ 'GAZZA 2' ★ 'TRACKSUIT MANAGER 90' ★ 'SUBBUTEO' ★ 'THE BALL GAME' ★ 'TREASURE TRAP' ★ 'ASTERIX' ★ 'SKIDOO' ★ 'LEONARDO' ★ TOP QUALITY JOYSTICK ★ 10 X 3.5" DS/DD DISKS ★

TOTAL RRP OF EXTRAS: OVER £180.00 !

All our ST prices inc.mouse, user guide, etc. PLUS 5 disks full of specially selected P.D. s/ware, inc. paint program, wordpro's, games, graphics & sound demos, desk accessories and utilities.

520 STE 'DISCOVERY EXTRA PACK'

This excellent STE starter package from Atari includes the Atari 520 STE with 1Mb Drive, 512K RAM, full digital stereo sound, PLUS extra software including:

'Dragon's Breath' ● *'Super Cycle'* ● *'Indiana Jones'* ● *'Anarchy'* ● *'Neochrome'* ● *'FirST BASIC'* ● *'Atari ST Tour'*

£299.99 inc.VAT and delivery

ONLY £329.99 WITH 1MB RAM FITTED
ONLY £369.99 WITH 2MB RAM FITTED
ONLY £439.99 WITH 4MB RAM FITTED

520 STFM 'DISCOVERY PACK'

Pack includes 520STFM computer, plus :

STOS Games Creator ● Outrun ● Carrier Command ● Bomb Jack ● Space Harrier ● Neochrome ● FirST BASIC ● Atari ST Tour ● 'Discovering your Atari ST' Book

£279.99 inc.VAT and delivery

ONLY £309.99 WITH 1MB RAM FITTED

1040 STE 'FAMILY CURRICULUM PACK'

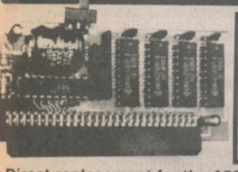
1040 STE including educational & productivity software : **Educational Software** modules, split into three age categories, from Early School to GCSE revision. ● **Productivity Software** featuring Wordprocessor, Database and Spreadsheet (RRP over £100) ● **Plus!** Hyper Paint, Music Maker and FirST BASIC

£369.99 inc.VAT and delivery

ONLY £449.99 WITH 2MB RAM FITTED
ONLY £529.99 WITH 4MB RAM FITTED

SM124 monochrome hi-res monitor	£ 129.95
Philips CM8833 Mk.II, inc.cable	£ 239.00
Joystick Accessibility Adapter for ST's	£ 4.95
Reference 40Mb SCSI Hard Disk inc.PSU	£ 325.00
Reference 100Mb SCSI Hard Disk inc.PSU	£ 469.00
Golden Image Handy Scanner Package	£145.00
VIDI-ST & VIDI-Chrome video digitiser pack	£ 99.95
VIDI-RGB colour input splitter for VIDI	£ 64.95
Dust Cover - for any STF / STFM	£ 4.95

AMIGA 500 512K RAM/CLOCK UPGRADE



£28.99

also available without clock for only £24.99

Direct replacement for the A501 Expansion ● Convenient On/Off RAM Switch ● Auto-recharging battery-backed Clock ● Compact unit size ● Ultra-neat design

A500 1.5MB RAM EXPANSION

(requires Kickstart 1.3)... **ONLY £79.00**

Kickstart 1.3 upgrade available from us for only £ 29.95

NEW! MEGABOARD

Connects to your 512K RAM Upgrade to give 1.5Mb!

With the MEGABOARD, you can further expand your A500's memory to a total of 2Mb *without* disposing of your existing 512K upgrade (must be 4 x RAM-chip type, or not exceeding 9cm in length). Needs Kickstart 1.3 to operate.

Installation requires no soldering! ONLY £59.95

ST SIMMS RAM EXPANSION SYSTEM

✓ Fits Atari STFM and MEGA series machines
✓ Uses SIMMS RAM Modules for Effortless Upgradeability
✓ Probably the neatest ST RAM Upgrade available !

RAM Upgrade (unpopulated)	£ 44.95
RAM Upgrade With 512K RAM Installed - upgrades a 520 to a total of 1Mb RAM	£ 74.95
RAM Upgrade With 2Mb RAM Installed - upgrades a 520/1040/Mega1 to 2/2.5Mb	£ 119.95
RAM Upgrade With 4Mb RAM Installed - upgrades a 520/1040/Mega ST to 4Mb	£ 199.95

N.B. Due to the large variance in design of the Atari ST, there is a small minority of boards in existence which may require a little soldering.

PLUG-IN SOLDERLESS ST RAM UPGRADES

Two versions allow upgrade to 1Mb, or 2 / 2.5Mb ● Simple, fast and effective RAM upgrade path ● Suits almost any 520 or 1040 ST model (not STE machines) ● Requires no soldering or technical know-how

512K VERSION : UPGRADES 520 ST's TO 1MB RAM	£49.95
2MB VERSION : UPGRADES 520 or 1040 ST's TO 2 / 2.5MB RAM	£99.00

ZY-FI amplified stereo speakers

GOT AN AMIGA, ATARI STE, ARCHIMEDES, SEGA MEGADRIVE, ATARI LYNX OR NINTENDO GAMEBOY?

THEN GET THE FULL SOUND POTENTIAL WITH THIS PAIR OF FULL RANGE, AMPLIFIED STEREO SPEAKERS!

ONLY £39.95

3½" EXTERNAL FLOPPY DRIVES

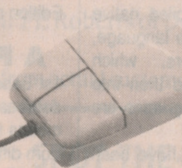
Compatible with the ST or AMIGA

Very quiet ● Slimline design ● Cooling Vents ● Sleek, high quality metal casing ● Suits any Amiga or Atari ST ● Full 1Mb Unformatted Capacity ● Quality Sony / Citizen Drive Mechanism ● Convenient On / Off switch on rear of drive ● Long reach connection cable for location either side of computer

AMIGA VERSION ONLY **£51.99**

ATARI ST VERSION ONLY **£54.95**

TRUEMOUSE (ST OR AMIGA)



WE GUARANTEE that this is the smoothest, most responsive and accurate replacement mouse you can buy for your Atari ST or Amiga. Excellent performance, amazing low price !

£17.95 *SATISFACTION GUARANTEED*

PHILIPS 15" TV/MONITOR

With its dedicated monitor input, this model combines the advantages of a high quality medium resolution colour monitor with the convenience of remote control Teletext TV - at an excellent low price ! NEW Version features dark glass screen for improved contrast, plus full range 3-way speaker sound output .

£269.00 Including VAT, delivery & cable

Philips CM8833 Mk.II including ST or Amiga cable .. £ 239.00

PRINTERS

ALL PRINTERS INCLUDE CABLE & 1 YEAR ON-SITE WARRANTY

Star LC10 best-selling 9-Pin PRINTER, SPECIAL PRICE	£ 129.95
Star LC 200 9-Pin Colour, 4 fonts, 180/45cps	£ 209.00
Star LC 24-10 24-Pin multifont, 180/60cps	£ 209.00
Star LC 24-200 24-Pin multifont, 200/67cps	£ 249.00
Star XB24-10 inc.COLOUR Upgrade and Sheet Feeder	£ 359.00
Olivetti DM100S 9-Pin, includes 1 Year on-site warranty	£ 115.00

olivetti DM124C 24-pin Professional COLOUR printer

Professional Quality 24-Pin Colour Printing - At an affordable price!

Offering advanced COLOUR output with the *superior* quality of Olivetti 24-pin printing, the DM124C represents excellent value! Consistent high quality is assured every time. *Guaranteed* Peace Of Mind, with 12 Months On-Site Warranty cover !

200 cps draft, 50 cps LQuality ● 7 Colour output; Graphics resolution 360 x 180dpi ● **Complete with cable, Colour Ribbon and 12 MONTHS ON-SITE WARRANTY**

Olivetti DM124C Normal RRP: £ 389.95 inc.VAT

SPECIAL OFFER! £269.00 including VAT and delivery

LYNX Portable Games Console

Only £109.99 INCLUDES POWER SUPPLY & GAMECARD OF YOUR CHOICE!

Electro Cop	£21.95
Slime World	£21.95
Klaxx	£21.95
Roadblasters	£21.95
Paperboy	£21.95
Rygar Warrior	£21.95
Zalor Mercenary	£21.95
Ms Pacman	£21.95
Xenophobe	£21.95
Blue Lightning	£21.95
Gates-Zendocon	£21.95
Chips Challenge	£21.95
Shanghai	£21.95
Rampage	£24.95
Gauntlet 3	£24.95
Cigarette Lighter Adaptor	£ 9.99
Sun Visor / Protector	£ 5.99
Lynx Pouch	£ 9.99
Lynx Kit Case	£ 14.99

Evesham Micros

ALL PRICES INCLUDE VAT @ 17.5% AND DELIVERY

Same day despatch whenever possible. *Express Courier* Delivery (UK Mainland Only) £6.50 extra.

RETAIL SHOWROOMS

Unit 9 St. Richards Road
Evesham
Worcs WR11 6XJ
☎ 0386 - 765180
fax : 0386 - 765354
Open Mon - Sat, 9.00 - 5.30

5 Glisson Road
Cambridge CB1 2HA
☎ 0223 - 323898
fax : 0223 - 322883
Open Mon - Sat, 9.30 - 6.00
IBM Dealer ● Corporate Specialist

1762 Pershore Road
Cotteridge
Birmingham B30 3BH
☎ 021 - 458 4564
fax : 021-433 3825
Open Mon - Sat, 9.00 - 5.30

MAIL ORDER DEPARTMENT

Unit 9 St Richards Road, Evesham, Worcs WR11 6XJ

Access

Call us now on ✆ 0386-765500

Lines open Mon-Sat., 9.00 - 5.30. Fax: 0386-765354
Technical support (open Mon-Fri, 10.00 - 5.30): 0386-40303

VISA

Send an Order with Cheque, Postal Order or ACCESS/VISA card details. Please allow 5 working days for Personal Cheque clearance.

Government, Education and PLC orders welcome
All products covered by 12 Months Warranty
All goods subject to availability.

PROGRAMMING

R.I.P. ZORTECH?

Symantec acquires Zortech, Borland has an SDK beater and Microsoft adds SQL to Visual BASIC. Mary Branscombe reports the week's news

Symantec Corporation, which produces Mac languages Think Pascal and Think C, but is better known for the Norton Utilities and the Q&A database system, has acquired Zortech, which specialises in C++ compilers and environments for DOS, Windows and the Mac.

This means that Symantec now has a range of powerful languages for both the PC and the Mac.

Zortech produced the first C++ compiler for DOS that compiled native C++ code straight to machine language, unlike two-stage compilers, which convert programs into C and then into machine code, and their languages are certainly impressive.

Borland's C++ products have been Zortech's main competition and it's perhaps not surprising that Symantec has chosen to buy in to a strong product rather than re-inventing the wheel by bringing out another C++.

The recent popularity of C++ can partly be explained by the fact that it implements many recent improvements in C alongside the object-oriented approach that concentrates on data, and on the objects that the program produces and works with, rather than on the code itself. This is ideally suited to window-based environments like Windows itself and the Mac was one of the earliest commercially successful object-oriented systems.

There are three new products from Zortech accompany the pooling of financial interests: version 3 of C++ for Windows, the Zortech Developer's Edition and the Science and Engineering Edition of C++ 3.

A FIRST FOR THE ST

1st-Base from Victor is a relational database for the ST, STE and TT, which means that you can link together records from different database files.

It's a very small program, taking up only 100K of RAM, so it runs on a 520 ST and you can actually run it as a Desk Accessory as well as a stand-alone program.

It's easy to redesign records because they're laid out like cards in a card index and the report language is very like BASIC. Information from the package can be exported to other databases, or to any GEM-based program. There's a comms program in the package as well.

Until Victor GmbH get a UK distributor, you can write to them at PO Box 1510, D-2058 Lauenberg, Germany.

VISUAL BASIC SDK

Microsoft's Visual Basic Library and Software Development Kit for their SQL Server will give you a hand if you need to write networked Windows applications that take information from SQL databases.

NEW MAC VISTAS

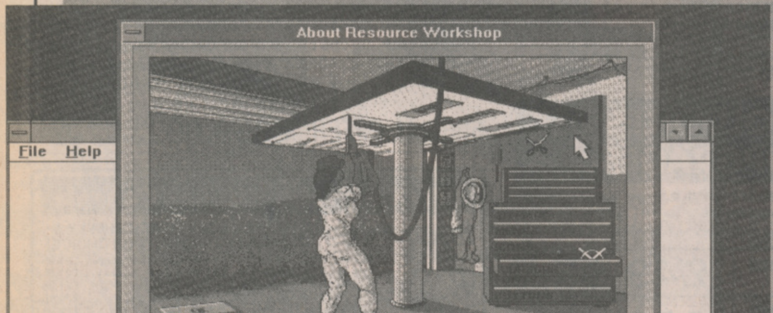
A Pascal interface for Systemstar's db_Vista III Mac database management system means that you can use your favourite Pascal file handling commands when building database applications, rather than learning a database language.

The hyper_Vista tool works with Hypercard to interface databases to multimedia devices like video disk players and CD-ROM drives. There are other tools to work with the 4th Dimension and SuperCard packages. ■

BORLAND LAUNCHES RESOURCE WORKSHOP

Borland has just announced the Resource Workshop, a Windows programming environment that threatens to do away with the expensive Microsoft SDK and the various Resource Toolkits supplied with it for different languages.

However small your Windows program, there are still a great many things you have to do first; for example, drawing icons, setting up windows and menus and selecting the palette. This is more like tedious housekeeping than programming and it's not surprising that simpler ways of setting up these programs (known in Windows parlance as Resources) have appeared. The first non-Microsoft solution was the Whitewater Group's Actor 3.1, a Windows development system which includes the Whitewater Resource Toolkit. That was essentially the same thing as Borland's new product – except for Borland's claim that the Resource Workshop integrates fully with the Turbo Pascal for Windows Integrated Development Environment (IDE), and with the new Borland C++ for Windows IDE, which is nearly ready.



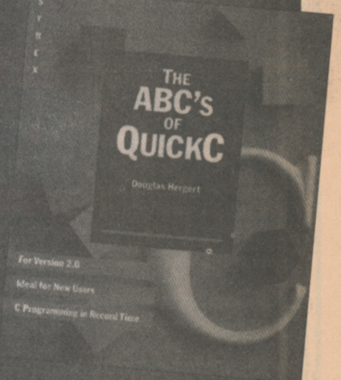
Version 1.00
Copyright © 1990, 1991 Borland International, Inc.

• Borland's Resource Toolkit – a set of useful programs and tools which can be accessed from any of their languages to make the tedious parts of Windows programming a lot easier

It seems that Borland's aim is to supersede the Microsoft SDK for Windows, enabling you to program the lower-functions of Windows 3 without using any of Microsoft's tools.

At present, the software is in Gamma form, which is one step up from a Beta test. A release version should be finished by mid-September. The version I've been working with is remarkably stable, and complete. It's surprising to see that the Resource Workshop's windows, like Borland's other language products, are still MDI compliant – so that a child window cannot go outside the parent – when Microsoft's Visual Basic has overcome this limitation. Otherwise, the Resource Workshop is intuitive and easy to use. It takes the drudgery out of the early stages of Windows programming development – a real time-saver.

C JARGON FOR BEGINNERS



• The ABCs of QuickC is full of jargon. It's for those who want to start at the very beginning.

The ABCs of QuickC • Douglas Hergert • ISBN 0-89588-557-3 • Sybex/Pitmans • £17.95

It would be very hard to get lost in this book. As well as the index and the contents, there's a brief version of the contents and a list of skills on the inside front and back covers and at the beginning of each chapter.

Rather than explaining what programs can do or what preprocessor are for, the book shows you how they work by pulling pieces of code apart and telling you how to put them back together. There's a surprising amount of technical jargon used for a beginners' book. It's all explained very clearly when a term is first used but that does mean that you need to work through the book chapter by chapter rather than just dipping in.

The main example program is revised in each chapter, so again, you need to stick to the order of topics in the book. That makes it more suitable for someone with little experience of programming.

If you already know how to program in another language and you want to see whether QuickC does things differently, you may want to look at arrays and data structures before you look at strings.

If you want a full introduction to QuickC as your first major programming language, The ABCs of QuickC works through the language in a logical order and it's good at explaining things that often sound inexplicable. The section on using pointers and indirection is particularly clear. If you do start at the beginning and get to the end, you will know QuickC very well.

SEE BELOW FOR COMPETITION

WIN

Tel 0257 276800
Main office & 24 hour order line
Fax 0257 274753
Help desk 0490 3284
Weekdays 3–4pm
Overseas orders please add £5.00.
All prices include P+P and VAT.

WITH *Intraset Ltd*

Our compendium of gaming software uses your computer's intelligence and logic to predict winners and advise you on strategy. Whether you're an experienced punter or a novice, with a little time and our range of software, you can maximise your winning potential.

'A licence to print money' Mr FC Hammond of Essex who won nearly £10,000 in 16 weeks

'We have won many thousands' Mr PE Roberts of Dorset who so far has won more than £46,000

*Copies of these and other endorsements from actual customers are available on request.

COURSEMASTER

Our proven horse racing program for both FLATS or JUMPS £24.95

*NEW

TRACKMASTER

The Greyhound Racing Tipster £19.95

Coursemaster & Trackmaster Twin Pack **£39.95 (Saving £4.95)**

Using simple information from the racing card in daily papers or the racing papers, COURSEMASTER and TRACKMASTER will predict with consistent accuracy.

The winner is predicted as well as second and third places for tricasts. The programs also mention attractive long shots, recommend types of bets and most importantly warn when not to bet.

Successful betting extends beyond merely picking the winners and COURSEMASTER and TRACKMASTER will assist in managing your bets. They work out your winnings on the most popular types of bet including SINGLES, DOUBLES, PATENT, YANKEE, CANADIAN, print out your betting slips, and even maintain your betting bank account. SYSTEM BETS will regularly provide a system for MAJOR WINS with small stakes – try it and surprise yourself.

COMPETITION
Details and rules

Our company likes to see people winning, which is why we're running our fabulous 'Win a pc competition'. With every purchase you make, you will automatically be entered into the draw. You can also enter for free by sending a postcard to INTRASET.

1st prize – PC NT286 Colour
2nd prize – Complete set of Intraset Business and Gaming Software **3rd prize** – Complete set of Intraset Gaming Software **5 runners up** will each win their choice of one Intraset title.

Intraset's decision will be final on all matters.
Send an SAE for list of winners.
Draw dates 28/2/92 and 28/9/92

SPECIAL OFFER POOLSMASTER and COURSEMASTER together for £44.95 (Saving £4.95.)

Our complete gaming suite: £110.00
POOLSMASTER (British & Australian),
PERM-MASTER, SPOT-THE-BALL,
COURSEMASTER, TRACKMASTER
Saving £22.70

Intraset Ltd
Send an SAE for full catalogue

POOLSMASTER British or Australian £24.95 each.

Poolsmaster British and Australian **£44.95 (Saving £4.95)**

The Football Pools Predictors

Developed after years of detailed study, POOLSMASTER uses a unique scientific formula to predict Home, Aways and Draws. The FORM PREDICTION option analyzes result possibilities with amazing accuracy. The unique indexing system allows for quick entry of fixtures and results, and updates itself season after season so there is no need to buy a new copy each year. Poolsmaster also contains a unique coupon number sequence predictor.

Together, both Poolsmaster editions cover **all** British league and cup matches and the Australian league.

PERM-MASTER £19.95
The perfect companion for Poolsmaster

Designed for users of PERM systems, PERM-MASTER ends the agony of checking by doing it for you. It comes complete with several of the top perms built in but you can also create your own with the unique PERM EDITOR and PERM CALCULATOR features. PERM-MASTER is fast and easy to use and can be used for most block and single line perms.
Additional discs of top perms are available at £14.95 each.

SPOT-THE-BALL £17.95

There is no more need for counting 'x's or using messy rubber stamps. Simply tell your computer where you think the ball is using the screen template provided. It will give you a print-out of up to 540 micro-fine crosses in your chosen shape or it can chose at random for you. SPOT-THE-BALL learns week after week and builds up a database of results for the SEQUENCE PREDICTOR OPTION.

GUIDE TO POOLS AND PERMS £14.95
The definitive guide to Pools permutations and betting systems

Written by the experts responsible for our successful software range. Master the fine art of prediction by reading this fascinating in-depth explanation of betting systems and perms. Plan a campaign for that elusive big win and use this books' tips on selecting the best matches and races and how to use perms to maximum effect on Pools, Horses and Dogs.

INTEREST-FREE CREDIT

Spend over £80 and spread the cost at no extra charge! (Cheque purchases only.)
Simply divide your order by 4 and send us 4 cheques each with your name and address and cheque guarantee number: Date the first cheque with today's date and post-date each of the other cheques by one month ie. 1/5/91, 1/6/91 etc. We will then hold each cheque until it is due.

All programs available for IBM/PC & compatibles, all Amstrad PC's, Amstrad PCWs, Atari, Amiga and CPC 6128. Coursemaster, Poolsmaster British and Trackmaster are also available for all Amstrad CPC's, all Spectrums and C64 & 128.

Send cheques or postal orders to INTRASET LTD (DEPT NCE) **FREEPOST,**
10 Woodside Avenue, Clayton-Le-Woods, Chorley, Lancs. PR6 7BR.
Phone or Fax for lightning service. All major credit cards accepted.

TECH TIPS

Need a bigger hard drive, want to start up a PD library, or are you looking at a low cost DTP program for your PC? You'll find all the info here...

Which drive?

Could you help me with regard to purchasing an additional hard disc drive for my IBM computer.

At the moment I use the internal hard drive to store all my application programs, and floppy disks for files and data. I would like to be able to store all data on the extra hard drive.

My system comprises of an IBM PS/2 Model 30 with the 8086 processor, an internal 20Mb hard disc, a 3.5-inch (720K) internal drive and an external Procom PXF 360 5.25-inch drive.

I do not mind if the drive is internal or external, and could I retain the existing 5.25-inch drive?

Your help would be much appreciated as to what I require and where would I get the equipment from.

Richard G Philpott, Whitstable

YOU HAVE GOT a choice of either an internal or external drive to add to your machine. The internal drive could be along the lines of a hard card, which has the hard drive fitted on an add-on card that is slotted into one of the expansion slots in your machine.

Or, alternatively, you could get an external drive. A controller card would have fitted into one of your PS/2's expansion slots, which could then interface the drive to the computer.

Either way, you should be able to keep your external 5.25-inch drive, provided, of course, that you have enough expansion slots to take the hard drive controller or the internal hard card. Of course, you could be lucky and have a hard drive controller already fitted to the card that controls your external drive – look at the manual for it and see.

KCS setup

In reply to the question by Joe Watling (Tech Tips Issue 145) about his Amiga not recognising a hard drive partition for the KCS Power Board, I think the point of his problem has been missed.

When running in the Amiga mode you want the Amiga to be totally unaware of the MS-DOS partition. You can do this by using the A590 Toolkit software that comes with it.

Enter the Toolkit and select 'Partition Drive'. Click on the MS-DOS partition in the disk map. Then click on 'Advanced Options', and then 'Change File System'.

You then see a gadget called 'Automount' and you should click on this to make it say NO. Also, in a previous window the 'Bootable?' option should also say NO. With both of these settings the MS-DOS partition becomes invisible to the Amiga system.

If you did the KCS setup correctly your MS-DOS partition will be recognised in PC mode only. But you can't have both partitions available together in Amiga or PC mode – as far as I know. Cross-DOS, for instance, only recognises floppy drives.

John Marchant, Putnow

THANKS for the tip – I'm sure Mr Watling will be most happy. If any other readers have tips that they think would be useful to other computer users, please don't hesitate to send them in.

Wrong capacity

I wonder if you could help me with a problem that I have with my PC-XT compatible. The trouble lies with its 720K 3.5-inch floppy drive.

The computer seems to think that it is a 360K 5.25-inch drive instead! I have tried to format a disk using *Norton Utilities 5, Xtree Gold* and DOS, but each time I am only offered the lower capacity. However, my drive is quite happy reading and writing to pre-formatted 720K disks. I have also loaded the System Information program in *Norton Utilities*, and according to it, I have a 5.25-inch 360K floppy in my system.

Could you please tell me where the problem lies, and if I can fix it, as it is very annoying (not just for me!) having to get a friend to format disks for me. The model of my computer is an Olivetti ETC 500, which I believe is also known as the Olivetti M19. (The machine, although I bought it new, did not come with manuals, for one reason or another.)

My second question is to ask if it is possible to get a 286 accelerator board on an expansion card, and if so, where from?

Paul Copley, Copmanthorpe

TO SOLVE your problem with the disk drive, when you boot up your system, run your setup program and tell the system what type of drive you have. That should solve all your problems.

And for your second problem, if you can get a 286 accelerator card for your XT (which you probably can) it would not be worthwhile as the 8088/8086 processor in your machine only has an 8-bit data bus whereas the 80286 has a 16-bit. In effect, this means that even if you do get an 80286, it could only operate through the 8-bit data bus and any advantages of having it would be lost.

Helpful companies

I wrote to you last month regarding a problem with the calculator of *Windows 3* on my Compusys 386

DIY PD

My friends and I have made some good pictures on *Deluxe Paint II* and *Photon Paint*, and we want to create a slideshow, with a *Soundtracker* module playing in the background. Is there a PD utility suited to this, or can it be done using the Amiga CLI (if so, how?).

Secondly, we would also like to start up our own PD library, charging only the disk cost, plus a postage fee. Is there anything we must do first, or anywhere we must register?

Thanks.

Ian Kidd, Killearn

TO CREATE A slideshow you really need a program made for the job, of which there are a large number in the Public Domain. These vary in quality, so rather than name anything specific it would be better to give your local Public Domain library a call and find out what they have in stock.

While starting up a PD library sounds like a nice idea, it's a lot of hard work. To all those people thinking about starting such a service, you really have to treat the idea seriously and be prepared to solve customer problems as well as know the products you're selling completely.

Since you'll be handling money from other people, and presumably be making some sort of profit out of the venture, then you will essentially be a company and should register as one.

To do this you would have to go to the IRS and get a Value Added Tax number, and if you run the business from home you would also have to register the premises for Poll Tax purposes.

• With a slideshow program onyour Amiga you can display as many pictures like this as you want

Of course, some people probably don't bother doing this, but if you're serious about the idea and are making an income from it, no matter how negligible, then you have to do the right thing.

PC. When booting up it was, occasionally, functional but mostly inoperative.

I am pleased to say that an approach to Compusys has solved the malfunction and all is now as it should be.

G Hughes, Milton Keynes

IT'S GOOD to hear from someone who's complimenting a company for a change.

However, your letter does bring up one point. When you write to Tech Tips it should be as a last measure, and not the first thing you do. Really, you should have called Compusys first (or maybe second; after phoning up your dealer), instead of writing to us here.

Just don't let it happen again...

TIP! Jet fighting

This is a reply to a letter in *Express* 143 from Colin Howard from Tyne and Wear about the Hewlett Packard Deskjet 500 and the Canon Desktop bubble-jet. He asked which one would be best to buy.

Personally, I would recommend the Canon model instead of the Deskjet 500 because even though the Deskjet 500 gives high-quality output for laser printer prices, what Hewlett Packard forgot to mention is that its ink cartridge has an alarmingly short life span (around 3 to 4 days). The problem is made worse by the fact that a new cartridge costs anything between £4 and £8 (plus VAT). With running costs such as these it would be cheaper to buy another ink-jet or save up for a cheap laser printer.

John Smith, Shetland Isles

THERE ARE FANS of both the Deskjet 500 and the Canon bubble-jet machines and both are good printers.

Running costs are an important consideration of buying any printer, but it must also be remembered that the print cartridges for the Deskjet can also be re-inked, cutting costs down.

Anyway, before we start a war between rival printer owners, let's just leave the matter here.

HELP Flattery will get you everywhere!

I'll start my letter with a little crawling, as I've not yet tried this approach, and, (purely coincidentally I must presume), I've never had a letter published. Your magazine is really so excellent, and I have bought every issue since I got my Amiga (since issue 48). I also buy your sister magazines, *Amiga Format*, and *Amiga Shopper*.

Now, I'll try for a little help. I have an Amiga, with an A590 hard disk. After six months or so, this is proving to be a little small, as I am also now starting up a bulletin board, and thus need a fair bit of storage space.

• There are many ways of expanding the A590 hard drive but daisy chaining a SCSI drive seems to be the way to go

As far as I can see, I have two options. I can replace the drive mechanism with something bigger (and faster), or I can daisy chain a second hard drive on the port provided for that purpose.

What do you suggest? Can I just buy any hard disk mechanism (I know the answer is no, but can you say which ones I can buy?). I've seen an ad for Evesham micros in your sister magazine. They offer a complete 40Mb drive for £299.00. They also offer another drive, exactly the same, for daisy chaining to the A590, for the SAME price. Why is this?

I thought that with the SCSI interface I could have up to 8 drives, and since the SCSI interface is not cheap, a daisy chained drive should be cheaper, shouldn't it?

What is the market for used, slow Western Digital 20Mb mechanisms (if I upgrade the mechanism)? Is fitting a replacement mechanism just a plug in and go manoeuvre? And if I daisy chain a second drive, can I populate it's motherboard with RAM like I have already done to the A590 (or will the RAM clash)?

Please answer this letter. I have written to you in the past, without success, and I believe that, looking at the number of second hand hard disks (and sometimes the bare mechanisms) for sale, this would be of interest to a number of your readers as well as just me.

Second question coming up. I have also seen an ad for a 7/14 Mhz 68000, for £40.00. This will work with revision 5.2+ Amigas. Mine is an old revision 5.0. Can I modify it so it will accept this chip?

There is also a big metal strip locking my Agnus (old) into place. It looks like it is not meant to be replaced. Have you seen this before? If you do not believe me I will send you a photo (leave me E-Mail on Aspects). Can I still replace it?

And finally, when will Workbench 2 be available? I read about this time last year that it would be soon next year, first that A500 owners couldn't get it, then that they could? What is going on?

David Mahon, Mexborough

LOOKING AT Evesham's ad and noticing that its price for upgrading the drive within the A590 to 40Mb and for a separate 40Mb external drive are the same (£299) you would have to check with them why they have priced them that way.

As to what you should do about expanding your drive, it would be better to daisy chain an external SCSI drive. Adding another drive similar to the A590 and expanding its RAM would not work, as there could be conflicts with memory address space. SCSI drives are reasonably priced, but your decision should be determined by whether you want just extra storage space, or whether you are looking for more RAM at the same time. For further details it would be best to get in touch with Evesham and some other dealers to see if their products do conflict with your existing Amiga hardware.

Alternatively, you could always sell your A590 (after making a back-up of the software, of course) and buy a bigger hard drive.

For your second question, it is difficult to give a definitive answer without knowing who produces the switchable 68000. Give whoever is selling it a call and see if they can offer any advice. Really, this type of upgrade should be able to work on virtually any A500, and it may be a matter of simply cutting a couple of tracks on the motherboard.

Workbench 2 has been promised for the A500 for ages now. The latest word from Commodore is that it will be released in early 1992, but whether it will come out then is anybody's guess.

HELP More ware wars

I am writing to disagree with Mr Pitcher (issue 144). He mentions nearly every computer under the sun but he seemed to forget one. Has he ever heard of the PC?

The Sam Coupé is not brilliant as he says. It is technically the best 8 bit computer around but the software support leaves a lot to be desired. It falls into the category of the Archimedes: great machine but no software.

In my opinion the best computer all round is the PC. The standard is rapidly becoming a 386 based system with *Windows* and VGA graphics and a 80 or 90Mb hard disk. For games I should think that most have a 286 or 386SX. Sound is not such a big problem anymore because of the availability and drop in prices of sound cards.

Price used to be a big deterrent but you can now buy an XT or 286 with VGA and 20Mb hard disk for around £600. VGA offers 256 colours on screen with a palette of 262,144 – far better than anything else on the market. Software support is no problem.

I also have a few questions:

1. **What low cost DTP program would you recommend for an XT?**
2. **Are there cricket games for the PC?**
3. **Finally, do I get £5 for this?**

Jeremy Hudson, King's Lynn

WHILE THERE CAN be no denying that the PC is turning into an excellent games machine, especially when it comes to strategy and 'interactive' games, it is also very expensive.

True, the price of PCs have come down in recent times, but to get the most out of these games you need a powerful PC with a decent graphics card – at least EGA – and often a hard drive as well. These don't come cheap (the £600 you quote can hardly be called a small amount of money) and many young games players won't be able to afford such a machine.

This isn't a slight on the PC – it definitely does have ability, but until it comes down in price it will have to be regarded as a bit of a luxury for games players.

And now, to your own questions:

1. There are a few low-cost desktop publishing (DTP) packages for the PC. For a start, take a look at *Timeworks Publisher* from GTS which is £112; call 0480 496666 for more information. A couple of others are Logi's *Finesse v3.1*, which is £149 (call 0753 37222), and *SPA Newspaper*, £75, on 0926 422959.
2. Audiogenic's *World Class Cricket* will be coming out for the PC, the company says, in mid-September. For more information, get in touch with them on 081-861 1166. ■

PROBLEMS?

Keith Pomfret might be able to help you so write to:

Keith Pomfret, Tech Tips,
***New Computer Express*,**
30 Monmouth Street,
Bath, Avon BA1 2BW

EXPRESS SALES

◆ ST

● **ATARI 520STFM,** 31/2/51/4" external drives, Microtext , Teletext adaptor, track master. £500 games. All master copies, magazines to. Worth over £1200. Will sell for £400. Will sell separately. Call Iain on 0563 24662. Kilmarnock.

● **ATARI 1040** (520 upgrade). 1 meg internal drive, mouse and software. As new, boxed. First £200. Tel: 0384 897943.

● **WANTED** ST games in original boxes. Send list to Graham Nimmo, 6 Haymount Park, Cupar, Fife, KY15 4AD, or phone 0334 54170 daytime or 0334 52604 after 6pm.

● **SOFTWARE** authors, top PDL looking for commisionware/licenseware deals we pay top rates. Contact: 66 Abbey Road, Strood, Kent, ME2 3QB. Tel: 0634 723550.

● **PD** catalogue disk. Now available our latest custom written catalogue disk. Over 180 new disks added to our huge collection. For your copy, send 50p (or blank +SAE) to: Jennix PD, 66 Abbey Road, Strood, Kent, ME2 3QB.

● **TIMEWORKS** DTP and first word plus £50 or £30 each. Plus Monkey Island, Operation Stealth, Future Wars and other R/P games. All originals £5 each. Phone (0202) 704247. (Evenings) Bournmouth area.

● **ATARI 520STFM,** mint, boxed, disks, M16-29 game. Bargain at £160. Also vidi-scan (cost £95). £40. Tel Woking (0483) 764857.

● **1/2 MEG,** internal drive for STFM. £10. Good working order, no case, plus postage, or buyer collects. Ring Eric 0438 755098 daytime.

● **4 MEG STE** £350. 2nd drive, £45. 48 meg hard disk, £350. SM124 mono monitor, £80. CM8833 colour £180. Protexts, £75. Pagestream, £75. Superbase, £40. F19, £15. F16, £12. Team Yankee, £12. Neo desk 3, £10. Leads/guaranteed etc. Details: 0352 770049.

● **ATARI** ST external drive (two months old), plus some software and magazines for sale. All in excellent condition. Genuine reason for sale. Phone Rich on (0533) 395143 for prices. Possible swap for similar Amiga extras?

● **WANTED** Top dog (Greyhound Tipster) program for Atari ST. Will swap with my Pro Punter (horse racing tipster) or pay cash. Phone Steve after 6pm. Portsmouth. 0705 691384.

● **WANTED** Flight Sim 2 scenery disks for ST. Has anyone got Kennedy Approach? Phone 0792 782075. 10am till 5pm. Ask for Kev.

● **2.5 MEG STM**. Tos 1.4. AT -Speed Emulator. Two 1 meg floppy drives. Hundreds of programs. £300 o.n.o. Tel Doug. 0494 715754.

● **ATARI 520 STFM**, mouse, joysticks, power pack games, STOS games, Creator and compiler, still boxed as new. £230 or offers. Phone (0226) 287024.

● **WANTED** Atari or Amiga computer, any age, any condition, must be cheap. Nothing refused, any other ST/ Amiga hardware considered. (0495) 272092.

● **FAST BASIC** computer system with both cartridge and desk versions, plus manual and toolkit. Just £25 secures. Phone Ian 0483 67482.

● **4 MB STE** 44Mb ICD hard drive, external floppy monitor, replay professional, samper, daata scan professional scanner, real time clock + lots of software; DTP, CAD etc. Nearly new £1200. Phone 0222 481876.

● **AMIGA** P.S.U. for A500, only £20. Amiga 1/2 meg with clock, £20. Amiga X-Copy hardware, only £10. Ring 021 558 6421 and ask for Tony.

● **AMIGA** Bantam Amigados manual, 2nd edition. £10. Standard mouse, £8. Honda RVF to swap, or swap the lot for F-15 Strike Eagle II, original or Mig 29 original. Tel: Gary 0473 713715 between 6-9pm only.

● **UPGRADE BOARD,** 4Mb populated for Amiga 1500/2000. Brand new, boxed and full guarantee. Selling due to change of computer. £250 o.n.o. Tel anytime (0304) 375311, postage paid. Expandable up to 8Mb.

● **AMIGA 500**, almost new, bought in December, still boxed, 1/2 meg upgrade, mouse, joystick and software. A real bargain at £400. Phone Lee on 0924 261941.

● **AMIGA** A500 1.3 + 2 meg internal memory, Syncro Express back-up unit, action replay cartridge, A590, 20 meg hard drive. All boxed and as new. £499. Contact Neil 0425 616605.

● **AMIGA** 31/2 inch disks used once in Amiga only, £35 for 100 Vidi Amiga Digitiser, £40. Replacement mouse £10. Please telephone 0527 541526.

.... COMPUTERS ....

For probably the best prices and deals on Home and Business Computers, Acorn, Archimedes, Atari ST's, Lynx, Commodore 64's, Amiga's, Amstrad, Star, Citizen, Canon, Panasonic, Sega, Nintendo Consoles. Plus printers, disk drives, monitors, memory upgrades and accessories etc. Great deals on PC's.

* FAX M/C's * ANSWER M/C's * PHONES *
Joysticks from £4.99 Blank disks 5.25", 3.5" 3"

SGM ELECTRONICS
19 Charles Street, Wigan, Lancs, WN1 2BP
Tel: (0942) 321435 Fax: (0942) 821273
Mon-Thurs 11.00am - 9.00pm
Fri - Sat 11.00am - 7.00pm or later
Repairs to most makes of computers

ARCOM COMPUTER SERVICES
IBM PC - NINTENDO - SEGA - ATARI - AMIGA
GAMES AVAILABLE FOR ALL MACHINES
IN ALL FORMATS AT GOOD PRICES
JOYSTICKS DISKS SOUND CARDS
FOR MORE DETAILS: **ARCOM COMPUTER SERVICES**
Alice House, 10 High Street, Ashwell, Herts. SG7 5NL
OR CALL **046274 2024** PRICES INCLUDE DELIVERY & VAT

● **WOODY'S PD,** an ST library where you choose individual programs to fill your disks instead of having to accept ready compiled disks which probably also contain programs you don't want. We let you choose! Tel 0942 715377.

● **PD COMPILATION PACKS .** Six top quality PD disks per pack. Cheques for £5 to Jennix PD. State one of following: Ark, programming, games, demos, D. A's educational. ST's only: Jennix , 66 Abbey Road, Strood, Kent, ME2 3QB.

● **WANT THE BEST PD** deal around? How about this PD disks from 90p. Disk catalogue only £50, listing 500 disks. Send cheques/P.O. cash (Jennix) to: Jennix PD, 66 Abbey Road, Strood, Kent, ME2 3QB.

● **1 MEG STE** turbo pack, 4 months old, lots of software + games, over 60 disks. Also magazines, joystick and mouse, will accept £350 o.n.o. Phone David on (0256) 862616 after 7pm only.

● **CALAMUS** fonts (two) £5 each, not PD. Clipart Image format £3.50 disk. People, sports, border, etc, not PD. Send large SAE fo details: 136 Oakdene Crescent, Nuneaton, CV10 ODT.

● **VERY** cheap hardware and software clearout. Please write to: Sid, 13 Harrowdene Close, Wemble, Middlesex, HAO 2JE. Please hurry, prices are very low. SAE appreciated, but not essential.

● **ATARI 1040STFM,** 20Mb HDD, SF314 FDD, SM124 monitor, FM Melody Maker, joysticks, Mice, STOS, loads of games, all boxed and in very good condition, only £450. Call Toby (0252) 616057 (evenings).

● **DAATASCAN** hand held personal scanner, hardly used. £80 or swap for Atari SM124 or 125 mono monitor. Tel: 0604 412159.

● **TIMEWORKS** Desktop Publisher and 10 disks of clipart with full instructions and original box. £45. Jim Erskine, 53 Lenaghan Park, Belfast, BT8 4JB. Tel: 0232 794812.

● **WANTED** Atari 520 STFM, just machine and mouse, no software needed. Must be working, £140 o.v.n.o. waiting. Call: 0634 723659 after 6.30pm and ask for Nick.

● **ST GAMES,** 125 original ST games for sale. All originals with instructions prices from £1. Send SAE to 53 Lenaghan Park, Belfast, BT8 4JB.

● **SELECT PD** for the ST, for list, send disk or £1 and SAE to R. C. Newman, 22 Hall Road, Leckhampton, Cheltenham, Glostishire. Over 100 cheats and free PD on disk. Prices from 35p per disk.

● **ST GAMES**, Sim City, Premier Collection, Precious Metal, Soccer Mania, Batman, Untouchables, Operation Wolf, Baal, Ballistix, Wizball Backlash, Double Dragon, Powerdrift, Toobin, Menace, Starquake. £6 each. £5 each for more than 1. Phone Malcolm (0460) 72711.

● **1040 STFM** colour monitor, external drive, LC-10 printer, 100 blank disks, some software + joystick. £400. Tel: (0209) 713766.

● **ATARI** Mega STE. Not released in UK yet. 16MHz Processor, 2 meg memory. 48 meg hard drive. Expected price over £1100. Brand new, boxed, only £900. 061 427 5616.

● **CODING** helpline for ST. Whatever your standard, from novice to commmercial, in 68000, GFA or STOS. Get in touch with us: Ady, The Bombout Brothers, 5 Summerville Road, Pudsey, LS28 6EL.

● **ATARI STFM**, good condition, under guarantee, games, joystick etc. only £150. Also Star LC-10, mint condition, only £60. Also remote car only £50, unused. Write to: R. K., 4B Currents Lane, Harwich, Essex, CO12 3DE.

● **PUBLIC DOMAIN** software for the Atari St, only £1.75 including postage, clipart, games, utilities, exclusive samples, demos, slide shows, send SAE + 50p for catalogue to: Mr G Ogden, Nightshift, 8 Bertelin Road, Stafford, ST16 3JJ.

● **STAR PD** Atari ST PD library, hundreds of quality disks at £1.50 each. Buy three disks and choose one free! Send blank disk and SAE for free PD and our disk based catalogue: Star PD, 1 Solva Road, Clase, Swansea, SA6 7NX.

● **ATARI** ST PD, swap shop? PD to swap or copy to your lists, blank disk + SAE to R. Kirk, Copes Farm, Withington, Leigh, S-O-T, Staffs, ST10 4PU.

◆ AMIGA

● **PLEASE** please has anyone got an Amiga TV modulator they can sell me. Will pay up to 15 pounds, will collect from Brighton area only. Call Nick (0273) 673639 or write to : 7 Brede Close, Brighton, BN2 5GR.

● **AMIGA PD !** Over 400 disks available you simply send extra blanks for my time and costs. SAE for details and listing. Enclose a blank for free demos. David Hopkins, 70 HIgh Street, Delabole, Cornwall, PL33 9AH.

● **AMIGA PD** from 18p a titles. Best prices, best service, increasingly expanding library, contact Darryl, 12 Kent Avenue, HFDS, HR9 5AQ.

● **LOTUS 1.2.3.** version 2.01, £110. o.v.n.o. Came free with Amstrad computer. Phone Colin (0900) 63326.

● **WANTED** Amiga Fred Fish disks or similar disk. If you have, then for details tel: Gary. 0473 713715 between 6-9pm only.

● **AMIGA PD!** Over 400 disks available. You simply send extra blanks for details and listing. Enclose a blank for free demos. David Hopkins, 70 High Street, Delabole, Cornwall, PL33 9AH.

● **AMIGA A500** hard drive, conner 42 meg hard drive and dataflyer controller 31/2" half height 25MS access time fits A500 or 2000 £350, no offers. Call Jane or ask for details on 0244 811559.

● **AMIGA PD** from 35p per disk, large range of adult/glamour disks (18+ only) monthly competition to win PD of your choice. Disk for list + demo. L & D PD, 10 Hornbeam Green Pontefract, West Yorks, WF8 2DX.

● **BITCOM DEVICES** PC-XT board, as new, hardly used, with original Dos 4.01 and latest revision software (12MHz Turbo Option) compatible with just about all PC Software, including games, £180. Tel John. 0229 823812 evenings/weekends.

● **DATEL** Digitizer as reviewed in July edition of Amiga Format, one month old, upgrade to A1500 forces sale. £70. Contact Danny 0692 402927.

● **AMIGA** Cumana Cax 354 Slimline disk drive box, as new. £40 o.n.o. Print cable + null cable disk drive, unknown fault, offers Reading. 0734 665842.

● **AMIGA 2000HD** 42Mb Quantum hard drive 3Mb RAM, CM8833 monitor, loads of software, excellent condition. £995 o.n.o. or with Roland CM 32L Syth. Module £1195 o.n.o. Phone Steve on Windsor (0753) 864382 after 7pm.

● **CBM AMIGA A500** with half meg upgrade, and over £1200 worth of games, demos and magazines, all in mint condition. Tel 021 447 7005 or 021 449 5463. All goods are boxed. I must be mad.

● **DO AMIGA** mad females exist? If so, I'd like one as a penpal, age around 20 preferred, not essential. Sense of humour, a must! Please write to: Adam Wright, 33 Great Holme Court, Thorpelands, Northampton, NN3 1YD.

● **AMIGA A500,** 1Mb, 2nd drive, sound sampler, joystick, some software, 50 blank disks + box, dust cover, mouse mat, all boxed, hardly used £320. Tel: 0795 318802.

X-Press PD CLUB

All latest Amiga titles available - £1.00 per disk, postage and packaging free.
Over 800 titles available - games, demos, music & utilities.
Free membership with 1st purchase. Orders sent same day
Below is a small selection of titles available from our large stock.

CHUBBY BROWN (1 Disk) - Comedy
FLASH QUEEN (2 Disks) - Music Sample
DEFINITE DOCKLANDS (1 Disk) - A must for 'Jarre' fans
GROOVE IS IN THE HEART (1 Disk) - Music Sample
HOLY SMOKE (1 Disk) - Loads of Utilities
KYLIE MINOGUE (2 Disks) - Excellent samples and Slide Demos
MADONNA (4 Disks) - Vogue Sampler
NOT THE 9 O'CLOCK NEWS (2 Disks) - Gorilla Sketch
SAMANTHA FOX 2 (1 Disk) - Slideshow (18+)
STAR TREK TRIVIA QUIZ (1 Disk) - Game

Discounts for orders over £20.00

We also supply sound tracker samples, T-Bag disks and our own disks and demos. Send S.A.E. for catalogue or blank disk for disk magazine.
Please send to:- K.Larkin, X-Press PD, 12 Hathaway Court, Cheriton Road,Gillingham, Kent, ME8 0ES. Tel: 0634 30638

● **ADES PD LIBRARY**, all PD less than £1 some even free. Send a fast return to you order, why pay lots when you can pay little. Ades PD, 15 Deanes Close, Dovercourt, Essex, CO12 4JH.

● **AMIGA 500** 1 meg, 3 drives, all leads and manuals, boxed + 250 disks including PD. All for £300. Ring 0582 608370 after 7pm. Ask for Steve.

● **FOR SALE:** 1.5 meg expansion card, 512k installed, £40. Publisher choice DTP package £45. Will send by post. Phone 026583 3370 after 5pm for K. K. or write to: 1 Church Pass, Portstewart, BT55 7AF.

● **AMIGA GAMES** swaps, Monkey Island, Conquests of Camelot, Metal Mutant, Power Monger. Make me an offer. Tel Nick: 0242 582471

● **AMIGA** Digiview Gold 4.0. £65. Amiga original, boxed, games, £5 each. X-Copy Proffesional with hardware, £15. Phone 082751738.

● **FOR SALE**. Amiga Atonce PC Emulator, hardly used, few months old, still with registration card, latest software, £140. Also Cumana 3.5 inch external drive, Eveshamm 0.5 meg RAM expansion. £60 for both. Phone Andrew (0495) 247475 after 6pm.

EXPRESS SALES

● **ATARI ST SOFTWARE**. Thirty recent games, including Powermonger, Armour Geddon, Lemmings, F19 Mitank, Lotus, Supercars 2, Speedball 2, Megatrav, Hard Driving II, Heroquest. £15 each or £250 the lot. Phone Mike between 4.30 - 5pm. 0224 663322.

● **AMIGA** 300 PD disks for sale. Any reasonable offers. Also high density disks (31/2") only 45p per disk. No time wasters please. Write to Robert, 63 North Avenue, Usworth, Washington, Tyne and wear, NE37 2LE.

● **HELP** I am in need of the Agnus Chip for my CBM A500, who is lonely without me. I also require a keyboard. Please write to: Steve Kennard, 12 Ashwell Road, Bury Street, Edmunds, Suffolk, IP33 3LU.

● **AMIGA 1.3,** games, manual, leads, D Paint 2. £230. Photon. 0745 824535. N. Wales.

● **B500-P YES!** B500-P with : 2(!) meg, 68010 processor, full ECS (including 'Flicker Fixing' Paula). RS 1.3, Fatter Agnus, Anti-Cick external drive, 2 PSU's, 10 games, 2 joysticks, mouse, modulator etc. Incredible value at £495 o.n.o. Amaze your friends! Phone David (0290) 22335.

● **ARCHIMEDES A310** computer with Acorn colour monitor, mouse, manual, games, PC Emulator 'First Word' processing 20 meg hard drive with printer, superb package, £895. Telephone (0332) 281540, will deliver Midlands area.

● **AMSTRAD ALT 286** Laptop 4Mb RAM H/case, 4 months old. Cost £1700, accept £1100 o.n.o. Phone Mark (0705) 599248 after 6.30pm (home).

● **2 IBM COMPATS** main board both with 512K RAM PSU and mono cards, XT for £35 and AT for £50. Also Thermal printer, only £10 or all for £90. Phone Steve 0932 223548 after 6pm.

● **WANTED** Archimedes on BBC Master 128K computer for school child. Good price paid. Will collect, any condition considered if price is right. Telephone (0332) 830140 and ask for Mark.

● **STUDENTS**: owns Torch Graduate G800/2 for BBC. Urgently need original manuals + software Dos 4, Hi-Res/ VGA colour monitor: Cheap Macintosh Desktop Fractal system, 31/2" 800K floppy with booklet. New unopened, £20. Ring Waseem. 021 784 2405 evenings.

16/32 PDL
(NCE),
35 Northcote Road,
Strood, Kent,
ME2 2DH

16/32 PDL is a PD library run by enthusiasts for enthusiasts with extensive collections of Amiga and ST Public Domain. We are Affiliate Members of the British Association of Computer Clubs and also the 'C' User group library. *Send £1 for catalogue disk stating which machine or an SAE for latest update.*

● **AMIGA SOFTWARE.** Protext v5, Prodata, Photon Paint, Dos-2-Dos and some others. Phone 021 355 5892.

● **DOC'S WANTED** for all serious software for the Amiga either hard copies or doc's on disk, also virus news wanted. Want a demo send me one returned with mine. Paul, 3 Moorend Avenue, Chelmsleywood, Birmingham, B37 55D.

● **START** your own Amiga PD library, buy mine! £250 inc custom catalogue disk. For a demo catalogue disk. Phone 0860 374783 days or fax/phone 0707 334289 anytime. No offers taken, everything done. Ready to run. Business.

● **FOR SALE,** Action Replay MK2 cartridge for A500. Datel Digitiser MK2, both two months old, owner upgraded to A1500. Floppy drive Rotec Slimline low power model. Amstrad SM2400 modem. All with extra software. Details phone 0692 402927.

● **AMIGA A500,** 10845 stereo colour monitor, Brother printer, second disk drive, mouse, joystick and over 100 disks of software and utilities. All leads, manuals and boxed. £550. (Bargain). Tel 081 398 1841.

● **PC SHAREWARE** £1.25 per disk, for list send SAE to Kevin Martin, Flat One, 28-34 New Road, Portsmouth, PO2 7RB.

● **IBM** PC needed for finals project. Ideally 4Mb 386DX, 40Mb hard disk, 1Mb super colour VGA is possible. Can pay £500. max. Offers to Ady, 5 Summerville Road, Pudsey, LS28 6EL.

● **750 PC SHAREWARE** programs/files compressed to 12 5.25" 360K disks. Pkunzip on first disks allows you to explode rest. £12 only. Tel Paul (0532) 498985 or 1Montague Gardens, Leeds, LS8 2RN, Also similar pack, 17 disks.

● **AMSTRAD PPC** 1640 portable built in modem, twin 31/2 ins disk drives, carrying case, manuals, still boxed, mint condition. £325. Tel: 0244 535310 after 6pm.

● **AMSTRAD** portable PPC512D, external colour monitor, Star-LC10 Multifont printer, all leads, manuals and organizer software/MS Dos 3.3 disk included. £400 o.n.o. Tel (0639) 887187 after 6pm.

● **WANTED** Archimedes computer for school child, any model or condition considered, will collect. Tel: (0332) 830140 and ask for Mark.

Did you know...
that to advertise in this space
and reach the 25,000-plus
most active computer users
in the whole of Britain
could cost you as little as £61?
To discover how *Express* can help you
sell more, call Charlie Nicholls
on 0225 442244 today

◆ PC

● **APRICOT** F1 256K 31//2 FDD monitor, good for wp. £90. X1 512k, 31/2 FDD monitor, £90. Sharp MZ700 £35. MSX, £25. Part exchange and swaps considered. Wanted 1/2 length VGA card, wanted VGA mono monitor. 0480 75036 after 7pm.

● **AMSTRAD PC2086** mono monitor with 30Mb hard disk. Boxed and in very good condition. £600 o.n.o. Tel Ian on (081) 9585508 after 7pm. Edgware.

● **1.44 INTERNAL** disk drive 1/3rd high grey front. £40 inc p+p. 720K internal disk drive, £30 inc p+p. Everex Magic 1/0 clock par serial 1/2 length card (new) £30 o.n.o. 3.5 DS/DD disks £5 per ten. Tel Peter 0322 662747.

● **AMSTRAD PPC 5125** portable PC. Brand new, boxed, manuals, case etc. Unwanted gift, still under guarantee. Phone 081 592 5603 (Dagenham). Buyer collects. £185.

● **PC GAMES** for sale, very cheap prices, send for details to: Raymond U., 52 Farndon Way, Oxton, Birkenhead, Wirral, LA3 2NP. Also does anybody need a BBC user guide, I've got one spare, you can have for £3.

● **AMSTRAD PPC 1640** portable built in modem, twin 31/2 ins disk drives, carrying case, manuals, boxed, mint condition. £325. Tel 0244 535310 after 6pm.

● **SAGE PC** software sterling financial controller. £160. Job costing, £50. Retrieve database, £60. Sage Payroll 2, £60. All unregistered originals with full documenation and both disk sizes. Tel: 0527 541526

● **IBM XT** (original in full working order, just needs floppy drive. £230. Ring Ian 0695 579106 after 6pm.

● **ATARI 65XE,** 1010 tape deck, joystick, Light Gun and games. £170 worth of software, computer magazines, manuals. Excellent condition. Sell complete for £120 o.n.o. Phone (0865) 772334 or write, Simon, 3 Trefoil Place, Northfields, Oxford, OX4 5UB.

● **AMSTRAD CPC 6128,** colour monitor, two drives, printer, Multiface two, ROM board, nine ROMS, joystick, tape, Light Pen, magazines, books, many utilities and games. Mint condition worth over £2000. Ring with offers between five and 6pm. 061 652 2556.

WIN WIN WIN WIN WIN WIN WIN
WIN WIN WIN
WIN!
A MEGA MAIL ORDER VOUCHER
DIAL: 0898·886·200
WIN WIN WIN
CALLS CHARGED AT 34P/45P A MIN. UOD LTD, CA2 5BB

● **ZENITH** Mini sport notebook XT, 2 meg RAM extra drive, lots of software, lead for printer, as new condition, must sell this week hence £420 and absolutely no offers. Call Reading 0734 566487 anytime.

● **IBM PS2 MODEL** 30/286 ie an AT, VGA mono, 20 meg HD, 1.44 floppy. New with on site maintenance. £500. IBM external 51/4. £100. 081 546 2979.

● **AMSTRAD 386SX** portable 2 meg RAM, VGA backlit, 41 meg HD (full) 1.44M floppy expansion slot, £1100. Would consider double floppy portable in part exchange. Tel Woking (0483) 764857.

● **AMSTRAD CPC6128** monitor MP2 modulator (TV/ computer converter) disk drive, data tape recorder, joystick, manual and wide range of software. £199 o.n.o. Carl Cox, Harrogate. 0423 509329 after 6pm.

● **COMMODORE 64** tapedeck reset cartridge over £400 worth of games, books, sell for £200. 1541 disk drive, software plus two disk boxes. £100. Phone 0475 20968 between 6pm and 8pm. Buyer collects.

● **CBM64** disk drive, printer 14 inch colour monitor, plus software, will split. £350 complete. Tel 0908 322050.

SmartArt Clip Art

[ ] **ANIMALS I** (Mammals, Fish, Birds, Insects, Reptiles, Monsters, Dinosaurs).
[ ] **PLANTS & TREES I** (Fruit, Veg, Trees, Plants, Flowers, Garden Tools, Shed).
[ ] **TRANSPORT I** (Cars, Trains, Ships, Planes, Tanks). [ ] **CAPITAL** (Gothic, Semi-outline drop caps).
[ ] **VARIOUS I** (Astrological, Snowman, Pills, Coins, Pram, Playing Cards, House, Computer, Vase).
[ ] **SPORTS I** (Football, Cricket, Basketball, Boxing, Gymnastics, Athletics, Karate, Baseball, Golf).
[ ] **VARIOUS II** (Frames, Borders, Special Occasions). [ ] **MEDICINE & SCIENCE I** (Human Body parts).
[ ] **MILITARY I** (Tanks, Planes, Ships, Missiles, Helicopters, Soldiers in action, Weapons).
[ ] **SPORTS II** (Skier, Rugby, Polo, Volleyball, Hockey, Horseracing, Runners, Exercising, Football).
[ ] **BUILDING & FURNITURE I** (Houses, Castles, Chairs, Tables, Desks, Bedrooms, Bathrooms).
[ ] **RELIGION I** (Christian, Islamic, Jewish, Hindu, plus images from other religions).
[ ] **ANIMALS II** (Mammals, Fish, Birds, Insects, Dinosaurs, Monsters).
[ ] **RELIGION II** (Mainly Christian images.) [ ] **BUSINESS I** (Office/Business images).

Each subject matter disk contains between 40 to 60 high quality images suitable for most IBM PC compatible Desktop Publishing and other programs that accept images in PCX or IMG format. The SmartArt Clip Art Library contains over 1800 images, send a SAE for a complete list (list sent with all orders).

£4.95 each Any 5: £19.95 Any 10: £39.95 Any 15: £59.95

When ordering please state Format PCX or IMG and disk size 3.5" or 5.25". Make cheques etc. payable to: **R. BENNETT**
PantherSoft (SmartArt), 2 Riverway Gardens, The Meadows,
Nottingham, NG2 3LL Tel: (0602) 860664

● **PC ACCOUNTS** software, for sale. Money Manager Plus, Digita Home Accounts, £10 each. Also many accounts, share tracking programs etc. Phone Steve 081 540 6271 eves.

◆ 8-BIT

● **SPECCY** stuff - 100 tapes from various speccy magazines. £30 o.n.o. Specdrum machines + software. £10. Tel 0377 70556.

● **CBM64** with printer, disk drive, tape unit, joystick, b+w T.V and loads of games. All in good condition. Phone 081 575 3185 evenings only. £225 o.n.o.

● **C64,** disk drive, datacassette printer, Introduction To Basic 1 And 2, Print Shop, action replay cartridge, mouse-cheese, Word Perfect, RAE WSST Manual, Geos User Guide, games, disks, Longotron Writer Filer,- Planner, £295. Tel 0706 882639.

● **WANTED** Expert cartridge for Comm 64. will pay £10. Also want support disks for replay/Freeze M. Also PD utilities. Phone Eric 091 2634866 or write with lists to 182 Rawdon Court, Wallsend, Tyne and Wear, NE28 6YJ.

● **MICROTEXT** Teletext adaptor for the Commodore 64 or 128. £90. (Power supply, tuner, adaptor and software). Phone Steve on 0293 532571. Crawley, West Sussex evenings.

● **FOR SALE** Multiface 3, £35. +3 P.S.U., £39, or will swap for 48K hardware. Write to: John White, 16 Witcombe Point, Clayton Road, Peckham, London, SE15 5EH.

● **SPECTRUM +2A** for sale, including PSU and leads, with manual. 26+ games, including Batman, Robocop, Indiana Jones, Trivial Pursuit, Live And Let Die, and many more. £110. Phone Andy on 0858 431606.

● **EXCELLENT** condition Spectrum Plus 3 with mouse art package, also games software. (F19). All leads included, offers between £130 - £180. Acceptable. Phone David on (0605) 49339 after 7pm thanks.

● **AMSTRAD CPC 464**, colour monitor, joystick + £ worth of software (utilities + games). Ideal first computer, will sell for £195 o.n.o. Ring Neil on (0532) 583759. Quick sale wanted.

● **SPECTRUM 48K** with leads, power supply, games, magazines, and demos, joystick interface, joystick and cassette recorder, only £55. Tel 0532 533368. Also budget and full price games from £2.

● **ATARI 8-BIT** games, 25 cassette based originals, inc star Raiders Centipede, Tennis etc. £15 + postage. Write to Tony Rendell, 89 King Edward Road, Swansea, SA1 4LU. All 800XL 65XE 130XE compatible.

● **SPECTRUM** with add-on disk drive, disks and over 20 games. Also Commodore 64, cassette, magazines, over 10 games, only £75. Also Casio HT700 midi keyboard, only £85. Spectrum only £100. Phone Paul (081) 593 4670.

● **WANTED** correspondance with Pools Punters on Comm 64 to swap ideas and programs on ways to win Eric Forster, 182 Rawdon Court, Wallsend Tyne/Wear. NE28 6YJ or Tel 091 2634866.

● **COMPUTERS** for sale: Commodore 64 with Gun + £300 worth of software and extras, Apricot PC with monitor and manuals with software and 2 x 31/2" disk drives both £175 for C64. £150 for Apricot PC. Phone 0634 243216.

● **BBC BITS:** 80TRK disk drive, torch Z80 64K board, mouse, joystick, books, software. £100. Also solidisk four meg 256K RAM/ROM expansion board with manuals + software. £50. Call Wasem Haq. Birmingham. 021 784 2405 evenings.

EXPRESS SALES

● **TWO-IN-ONE** bargain! Amstrad 8256 with monitor, printer, drive, manual, software, books and Sharp MZ-80k Micro with screen + tape in built + software, manual etc. Both only £400. Excellent condition. Ring Wasem 021 784 2405, evenings. Birmingham.

● **SPECTRUM +2A,** Light Gun, 19 tapes, £85. Phone 0376 42444.

● **BBC-B** inc View, Back-Up, and printer, driver Rom's, twin 40/80 track teal disk drives with power supply. All boxed and as new. £275. Contact Neil 0425 616605.

● **AMSTRAD CPC 464** with monitor and disk drive and a 64K RAM expansion, complete with disks, tapes, 50/60 games and all manuals and magazines. All good condition. Bargain at £199. Phone 0202 514498 anytime.

● **BBC MASTER** compact colour monitor, 31/2 and 51/4 disk drives, mouse, loads of magazines, books, some software. £370 o.n.o. Phone 0705 464071.

● **ATARI 130XE/1050** disk drive/Touch Tablet/mouse, joystick games paper clip print shop, movie maker and much more. £100 o.v.n.o.

AMIGA/ATARI/PC PUBLIC DOMAIN
ALL TITLES ONLY 99p*

3M 3½" double sided DD Disks only 75p* each.

Bulk 3½" DSDD Disks only 35p* each.

We buy/sell/exchange original software for all computers.

Phone 051-691 0072
or stamped addressed envelope to:

P.E.S.
P O Box 32, Wallasey, Merseyside, L44 1ES
*Minimum quantity 10
P&P only £1.00

VISA Access

● **+3 FOR SALE**, Multiface tape recorder, joystick, 140 games, cassette, leads, joystick, adaptors, 8 blank disks. All for £460 o.n.o. Will throw in rubber keyed 48K. Total original price is over £1000. What a bargain.

● **SPECTRUM +3**, Multiface paint package disks, disk box, Light Gun, Tasword, Tasspell, Tasprint, Tascalc, Kobrasoft, utilities, Kempson mouse etc. May split. All boxed as new. Sensible offers. Phone 0782 612393.

● **AMSTRAD** PCW9512, S.C.A. 512K RAMpack, 3.5" B drive, Locoscript 2, v2.29, Locofile v2.29, auto sheet feeder, Protext, printer support pack, Micro Design 2, backup, Foreword, Lancelot, dust covers, The Business, complete system. Tel Bolton 0204 694729. £550 o.n.o.

● **COMMODORE SX64** portable computer with built in floppy drive and colour monitor, fully compatible with all CBM64 disk and cartridge software. Perfect working order. Bargain at £150. No offers. Phone 081 395 2525.

● **SPECTRUM +3** for sale with B+W television, all leads and plugs, joysticks, data recorder (tapes), games, manuals and many magazines. All in excellent condition. £180 o.v.n.o. Phone 0726 814520. Ask for Peter. Sorry, but buyer must collect. (Cornwall).

● **BBC MASTER 128K,** 40/80 51/4" disk drive plus Microvetic cub colour monitor Yamaha SHS-10 midi Keyboard. £450. Phone 0473 603426. Buyer collects (Ipswich area).

● **BROTHER HR5** Thermal printer, £20. Also Spectrum hardware: interface one with Microdrive and ten cartridges. £30. Timex 2040 Thermal printer with spare paper roll. £20. Currah Uspeech £5. Phone 0449 722207 after 7pm.

● **WANTED** for Commodore 64, Action Replay cartridge, must have instruction booklet. Phone 0606 559522.

● **ACORN ELECTRON** 52, old but good software titles on tape include Arcade Adventure Education and utilties. May sell separately. £35. the lot. Phone Colin (071) 253 3698 weekdays.

● **DD-1 DISK DRIVE**, with interface for CPC 464, with some software eg Rainbow Islands, Stromlord, Cybernoid, blank disks, disk box, manuals. All excellent condition and complete bargain at £70. 0480 61253. Huntingdon. Also Multiface 2. £20.

● **COMMODORE 64** cassettes, 60 games, £75 inc F.M. 2, Elite, Kick Off 2, A. P. B, Super Monaco G.P., Total Eclipse, etc. Also mouse and cheese. £10. 8 C64 disk games inc F.M. 2. £15. Buyer collects (Hartfield Herts). 0707 266700.

● **SPECTRUM 48K+,** PSU, leads , manual, lots of games, new fonts etc. £60 + Zx81, 1K, manual, PSU, leads, sone games £25(?) or swap either, for CPC 464, or Amiga bits. 205 Ballard Walk, Basildon, Essex, SS15 5JU.

● **C64,** datasette, reset switch, Quickshot Turbo III joystick, unused, manuals, leads etc, plus over £1500 worth of original games, including Turrican 2, Super Monaco G.P., Rick Dangerous II, etc. £200 o.n.o. Richard Fisher Kettering. (0536) 510719 after 5pm.

● **AMSTRAD CPC464** with mono monitor, approximately 20 games, joystick, 100's of magazines, back to 1985, manual, all perfect working order, summer bargain. £80. Also CPC464 disk drive, plus software, etc. Only £70. Please phone 0480 61253.

● **PROGRAM PACK**, the all new Spectrum Tapezine needs your help! We would like any contributions, anything from reviews of games, to homemade programs. Also news, artwork, 128K music etc. For details call Alex (081) 777 6241.

100 DS/DD DISKS + 1 x 100 Cap Box + Labels ONLY £40. inc

LOOK
100 x 3½" Disks
100 Cap. Box
100 Labels
£40.00!!!
MF2DD

FREE P&P

Same Day despatch on Access/Visa/P.O

100 DS/HD Disks + 1 X 100 Cap Box + 100 labels

£65.00
MF2HD

KC VIDEO
6+8 DONCASTER RD
SOUTH ELMSALL
NR PONTEFRACT,
W. YORKS WF9 2HZ

Cheques payable to KC VIDEO

Tel: 0977 - 649100 (Fax: 0977 - 643312)
Mail order only - Loads Atari + Amiga goodies - price list available
Opening hours:- Mon-Fri 9.30am-7pm/Sat 9.30am - 6pm/Sun 10.00am-3pm

VISA

● **ACORN ELECTRON** £40 o.n.o. Dragon 32 £35 o.n.o. Many 2600 Roms's from £3. Atari 800XL £40 o.n.o. Atari 800. £35 o.n.o. Atari printer, £60. Thermal printer. £30. Atari 400. £25 o.n.o. 051 632 3515.

● **AMSTRAD CPC464,** including colour monitor, £300 of latest games, including Hard Driving, Chase HQ, Robocop, all orignal games, 2 joysticks, manual, worth over £600. Sell £200. Contact Phil Rochdale. (0706) 47262 after 5.30pm.

● **WANTED** desperately Commodre 64 music expansion system to include Sound Expander, Sound Studio and five Octave keyboard. Contact Agnus Bryant, 64 Fisher Avenue, Rugby, Warwickshire, CV22 5HW.

● **WANTED** Romantic Robot, Multiface 128 Interface for Sinclair Spectrum 128K. Will pay up to £20. Call Alex on 081 777 6241.

● **PROGRAMMERS!** Send you utilities, demos, etc to us and we'll include them on program pack, (a new speccy tapezine) and give you a years free subscription. Call Alex on (081) 777 6241 for further details.

● **C64 DISK DRIVE** and serious disk software wanted, also Motherboard. Phone Brian 0536 745908 or write to 36 Lincoln Way, Corby, Northants, NN18 9HL.

● **BBC B**, Watford Rom/Ram board, dual disk drive, View 3, logo, basic editor, RGB monitor, Acorn data recorder. £275. Tel Caernarvon. (0286) 3887.

◆ CONSOLES

● **MEGADRIVE** - Takes all carts, displays English text, can switch between PAL or Scart, plus Strider, Altered Beast. Boxed in excellent condition with four months guarantee. Sell for £120 o.n.o. Phone Jason on 0909 771707.

● **ATARI LYNX** for sale with Rygar Paperboy and California games, comes with power pack and head phones. All games and Lynx in good condition and boxed. £140. Phone 0524 61755.

● **BARGAIN** Atari Lynx for sale! Only used twice, includes adaptor, Comlynx cable, games inlcude Rampage, Gauntlet Three, and California games. Genuine reason for sale. £115. Tel: 0536 82143, ask for Ryan. Still boxed as new.

● **STAR LC10** colour printer, boxed as new. Perfect condition, hardly used. Amiga parallel cable. £150. Medway (0634) 712189.

● **WANTED** Hewlett packard Deskjet/Deskjet +/Deskjet 500 in exchange for Olympus OM-40 camera outfit. Kit includes 50mm lens, 28-70mm Macro zoom, Winder 2, T-20 flash Vivitar 2500 flash gun, 2 x converter, bag etc. Cash. £225. Tel 0275 375496.

● **STAR LC10** with manual and box. Excellent condition, small stand for printer. Paper included. Price £120. Tel 0532 681920.

● **STAR LC200** colour printer, 4 black and 2 colour ribbons, 500+ sheets paper inc, ST ribbons £160. Tel 041 620 0617.

● **RS232 INTERFACE** for Citizen 120D(+) printer, only £20. Phone Ian on 0483 67482.

● **CONSOLE CRAZY**, new fanzine for consoles only 80 pence! Send cheques or postal orders to: Console Crazy, 28 Watergate Lane, Woolton, Liverpool, L25 8QJ. Wanted: Reviewers for Super Famicom, PC Engines, N.E.S. and Master System.

● **WANTED** PC Engine titles, Final Match Tennis, Motoroader 2, Parasol Stars, for sale Space Harrier £7. Tales Of Monsterpath £7. Wonderboy in Monsterland £9. Pacland £10. Leg Axe 2 £15. Tel 0602612713 after 8pm.

● **I WILL SWAP** Sega Megadrive with 3 games, J. Madden, Street Smart and Super Real Basketball and game gear with GG Shinobi for a Super Famicom. PA1 or scart. Phone Reuben Mack on 081 684 5226.

● **SUPER FAMICOM** for sale with one game, £180, or will swap for Commodore Amiga. Phone 0572 770122.

● **FOR SALE,** brand new never used Scart Super Famicom plus Sim City, Baseball and Actraiser, bargain at only £290 p+p. Phone Karl on Aylesbury 0296 395378 Famicom still 12 months guarantee.

● **PC ENGINE**, 17 games, joystick, Booster and magazines. Ghost and Goblins, Arcade P.C.B., both boxed as new. Matt on 021 743 4863.

● **SEGA MASTER s**ystem plus boxed as new, manuals etc. 2 games, 2 joypads, joysticks, Light Gun everything boxed new, worth over £300. Sell for £100 or swap for Atari ST. Buyer collects. Phone David Potters Bar. 0707 57231.

● **NINTENDO** Gameboy pack, AC Adaptor and Tennis game. £80. Everything can sell separately. Write to: John Hughesman, 50 John Kennedy House, Rotherhithe Old Road, London, SE16 2QF. Separate: Gameboy. £60. Adaptor £20 and Tennis game £10.

● **NINTENDO** Gameboy, not used, unwanted present with Tetris game including headphones and carrying case only £48. Phone Canvey (0268) 691217 after 6pm. Buyer collects. Also two player lead.

● **SEGA** plus five top games all cost £30 each, want offers over £80 or offer of Amiga hardware or software. Large number of disks, etc. Paul Moorend Avenue, Chelmsleywood, Birmingham, B37 5SD.

● **SUPER FAMICOM** with one game, brand new, £220 o.n.o. Master System with five games, £95. Megadrive scart, £70. Games from £10. Phone Matt on 0403 60069 evenings and weekend, not Wednesday.

● **MEGADRIVE** (UK), extra control pad and Super Hangon: £120. Populous £15, John Madden (unboxed) £15, or £140 the lot. Phone Carl (Reading) 0734 484897.

● **GAMEBOY,** Lightboy, Tetris, Mario Land, Batman, Spiderman, Buriai Fighter, Gator Pinball, Gargoyles Quest, Fortress Of Fear, World Bowling, carry box all leads, Nicad batteries + charger, mains adaptor. All only £200 plus p+p. 0309 690091.

● **NEO GEO** with baseball and Nam and second control (Scart), only £375. Also Famicom (Scart) with F-Zero and Populous, £220. Four other Famicom games, available at £25 each. All above boxed, as new. Phone 0322 863656.

Composit Software

The Composer's Pen PC
Unreservedly recommended"
New Computer Express.

only
£125.00
(excl VAT)

Sempre vivo
Meno vivo
ff
sf
p

Features include:
- Up to 99 staves
- Up to 20 note chords
- 9 octave pitch range
- Any number - tuplets
- Seven clefs
- Transposition
- Comprehensive beaming and flagging
- Full control of note and stave spacing
- Text and standard music symbols
- 'Cut and paste' music
- Print the score and the parts
- Clear manual written by a musician

Send for details & sample printouts or ask at your local music/computer shop

Order now! Telephone hotline
0952 595436

Composit Software Dept N/147
FREEPOST
10 Leasowe Green, Lightmoor,
Telford, Shropshire TF4 3BR

Cheques payable to Composit Software

Access VISA

● **FOR SALE**.Sega gamegear with Super Shinoni, only 3 months old, full guarantee. Bargain at £75. Phone 081 684 5226. Robert.

● **WANTED** PC Engine games, Gunhead, Final Lap, and more. Also are there any PC Engine clubs or groups somewhere. Write to me please. Bal. 62 Lissenden Mansions, Gardens, London, NW5 1PR.

● **MEGADRIVE:** I have Tatsujin, Ghost Busters, Super Shinobi, and Arnold Plamers Golf, to swap. Any game considered, especially P.G.A. Tour Golf and Ghouls And Ghosts. Tel: (061) 620 5350.

● **WANTED**. Hand held PC Engine with game(s). Will pay £240. Bare £270 with games. No timewasters please. Call Simon on 0430 440301 or will pay £60 for gamegear with 2 games.

● **PANASONIC KXP 1081** printer, very good condition. £95 o.n.o. Phone 081 886 6114 mornings, 081 889 8426 evenings.

● **18 CARAT GOLD** pen (solid gold!). Will swap for decent printer, preferably colour, must be working. Phone me on 0255 862205 (Essex). Pen also has space for engraving.

● **WANTED** printer, compatible with Amiga and Amstrad 464 computers. Preferably Epson FX or Star, in decent condition, must be fairly cheap, VP to £60. Phone Andy on 0706 43363. Rochdale area. Near Manchester. Anything considered.

● **DEC LASO PRINTER**, manual , 2 spare ribbons. Compact and fast (100CPS) but not Epson/IBM compatible and Serial only, hence £25 o.n.o. + postage. Mid Sussex. 0342 810784.

● **OKI MICROLINE 182** Dot Matrix printer, brand new in box. £120. 081 904 2545. Wembley.

● **NEC P7 PRINTER** 132 colour 9PIN only. £130. Ideal for business with moderate through put. £130. Ring Ian 0695 579106 after 6pm.

● **AMSTRAD DMP** 2000 printer, £60. Parallel Interface. Needs new ribbon, Epson compatible ribbon cable not included, was £159 new. Phone 081 444 0709 (evenings) Buyer collects.

● **WANTED** auto sheet feeder for Citizen Swift 9PIN printer. Ring Eric on 0438 755098 Daytime.

On-line
A breakthrough in MULTI-PLAYER entertainment
Got a modem - Join instantly!
Playing now,
the award-winning adult space fantasy **FEDERATION II**
Flying now the Multiplayer 3D combat flight simulator **AIR WARRIOR.**
COMING SOON....The original, the legendary, the classic **MUD**
FREE Membership as a special introductory offer.
LOG ON NOW TO FIND OUT MORE CALL **081-539 6763**
642a Lea Bridge Road London E10 6AP

● **GAMEBOY** with mains adaptor, Tetris + Golf. £70. 1 month old. Also Lynx with adaptor, Gauntlet 3, Chips Challenge, Gates Of Zendecon, Electrocop, worth £220. £120 or swap for game gear. Phone Seth on 021 3553841.

● **SEGA MASTER** games, over 50 available from £6. Also Megadrive and Gameboy carts, wanted, will pay up to £12 each. Write to Alex, 11 Elizabeth Place, Sompting, west Sussex, BN15 9UJ, or phone 0903 767030 after 6.30pm.

◆ MONITORS

● **PACKARD BELL** 14" non-glare colour Multisync monitor. Analog/TTL inputs. 800 x 560 resolution 0.31mm dot pitch. Hardly used. £220 o.n.o, or swap for Philips 8833 MKII or Commodore 10845. Tel: Paul 0628 665312 evenings. (Slough).

● **PHILIPS CM8833** monitor, tuner and monitor stand, excellent condition. Offers around. £190. Phone Carl (0734) 484897 (Reading).

● **MULTISYNC** monitor by A.O.C., 1024 x 768 resolution now interlaced, 6 months old with leads, suit IBM compatible, Amiga, Archimedes, etc. £150. Wayne (0703) 243358 after 6pm. Weekdays only. (Southampton).

● **STAR LC24** 200 24PIN printer, with multiple fonts, advanced paper handling Basicall brilliant machine. £250. Phone Ian on 0695 579106 after 6pm.

◆ MODEMS

● **DACOM 24/48** intelligent modem v22bis v21, v22, v23 prestel auto everything, MNP 5 error correction cost £450. Accept £225 o.n.o. Phone (051) 226 3356 after 6pm. Ask for Darren.

● **COMMODORE 64** modem and auto answer unit, £37 + needed software on disk. Also Turrican 2, £4. Write to Dan, 31 Eastern Avenue, Gainsborough, Lincs, DN21 1RQ.

● **GOT AN HST!** Well flog it me! Oh go on? Phone Amiga II BBS on 061 962 6377 after 6pm. or before 6pm on voice. TTFN.

● **MODEM** v21/v23 with autodial for sale, includes leads and software, accept £60. Tel (061) 339 4187.

● Linnet v21, v23 intellegent modem, Hayes fully automatic, 32 number memory, still under guarantee, also ST software if required. RRP £180. Sell for £100. John Sheppard, 112 Carlington TCE, Heaton, Newcastle Upon Tyne NE6 5SJ.

Upgraded from C64 to PC or AMIGA ?
• Use your old C64 printer • Read your old disks
Our interface cable and software connects C64 peripherals to any IBM PC Compatible or Amiga except the A1000 - Attached via parallel printer port.
• Use MPS, DPS, VIC, Star, Brother, Seikosha and Citizen printers
• Epson graphics output on dot-matrix printers • C64 Not required
• 1541 file transfer program • Fully MS-DOS/AmigaDos compatible
Standard "Ami-64-Link" £35.25 "CBM-PC-Link" £35.25 (State disk size)
Budget* "Ami-64-Link" £23.50 Prices include VAT and delivery
** Budget locks Amiga during printing, no performance lost with Standard*
York Electronic Research (0904) 610722
The Paddocks, Jockey Lane, Huntington, York Y03 9NE
VISA

◆ PRINTERS

● **STAR LC200** 9PIN colour printer, includes lead for connective to Amiga, ST or PC. Boxed with 2 ribbons and users manual etc. £160. Phone Pete on: (081) 599 0556. Buyer collects..

● **EPSON FX800** 9PIN printer, extremely fast, ideal for all your orders for listing as it will chug through a tree day! Only jocking, £130. Ring Ian 0695 579106 after 6pm.

◆ SOFTWARE

● **ST SOFTWARE** for sale. STOS £10. Jet £10. Speedball £5. Red Storm Rising £5. Road Wars £3. Gato £3. All original disks with original packaging, buyer collects or pays postage. Call 081 299 0075 after 6pm.

● **PD FOR SALE** 90p + 50p post. Ring Caerphilly on 222 862890 or swap PD for PD. All disks are virus free for a list. Send SAE to 31 Trevelyan Court, Caerphilly, Mi-Glam, CF8 1RQ.

Prolog: A Practical Introduction
Prolog is a remarkable programming language widely used in Artificial Intelligence, Expert or Database Systems.
This disk based tutorial is for absolute beginners who wish to teach themselves how to program in Prolog.
It is intended to be used with the A.D.A. Public Domain Prolog Interpreter, available from us or a PD library.
It includes:
★ A 'hands'on' introduction.
★ A detailed explanation of how Prolog works.
★ A selection of application programs including utilities, printer formatting, parallel computer simulation and a cashbook program.
★ A reference manual which describes and gives examples of all the built-in features of Prolog.
Suitable for any PC compatible.
Prolog: A practical introduction (2 disks) £17
A.D.A. PD Prolog Interpreter (2 disks) £3 (prices incl. p&p)
Please send cheques PO stating disk size or S.A.E. for details, to
J. Tasgal, 15 East Meade, Prestwich, Manchester, M25 8JJ
Tel: 061 773 9365 (weekdays)

● **CONNECT** the ultimate pools system. IBM/compatible suits any budget. Stakes from £1.09 to £50.68. Yearly registraton £11.50. Free copy 22p stamp. It's effective, you'll wonder how you've ever managed without it. B. F. Hallman, 306 Dallow Road, Luton, Beds, LUI ITD.

● **PROTEXT** (version 4.22) for Amiga. £30. T. Perry, 6 Craigfern Drive, Blanefield, Glasgow, G63 9DP.

● **X-PRESS** for Stop Press disk wanted for Amstrad CPC6128 around £7-£8. Tel Coventry (0203) 362063.

● **WANTED !** Infocom adventurers for the Amiga Hust, inlcluding the full original packaging, willing to pay good price. Please write to: Ernesto Simad, Portimoveis, Rua Bento De Jesu Caraca, 1B/C, 8500 Portimad, Portugal.

● **WANTED** Impact game for Atari 520STFM. Buy or swap. Phone 04243 3925.

● **AMIGA** summer madness! Beast 1 +2, £5 each. 100 Amiga originals at £5. Sell/swap also 100 other Amiga games. £3-£15. Amos at £25. SAE list: 13 Bournville Lane, B30 2JY, or Tel (021) 459 7576 after 6pm.

WANTED advanced music system by Rainbird for the Amstrad 6128 £15 paid if in good condition. Mr A Clough, 12 Moorefield, Gildersome, LS27 7BW or phone 0532 525534.

AMIGA games summer sale! Surplus games sold cheap, or swap, sell from £3. Golf, Beasts, Wrath Demond, Strider 2 TMNT, Driving games, lots: Send SAE, 13 Bournville Lane, Birmingham, B30 2JY after 6pm. Tel 021 459 7576.

● **PC GAMES**, Space Quest 4, Kings Quest 5, Heart Of China, Wonderland £20 each. Indy 500, £15. Roland sound board. £250. All boxed in mint condition. Phone 0322 863656, ask for Darren.

● **PC SHAREWARE,** £1 disk +p+p over 2000Mb largest and best. Latest top Anglo Ameriacan titles. Best value, send 2 first class stamps for easy menu driven catalogue disk. 37 Devon Place, Newport, Gwent, NP9 4NW. 0633 259847.

● **AMIGA PD**, only £1 per disk, private collection, all quality programs, virus free. Send SAE for free catalogue disk to: D. Jackson, 22 Victoria Court, Clifton Road, Worthing, Sussex, BN11 4DT.

'THE ATARI ST DEMO SPECIALIST'
D.W. Stables, Unit 1, Johnson's Shopping Centre, 29/31 Bond Street,
Blackpool FY4 1BQ Tel. 0253 404550 Fax. 0253 406053
If you would like to possess a collection of fantastic graphics, animation and music disks at low cost you are reading the right ad! I have one of the most comprehensive Atari ST Demo Libraries in Britain!
SEND ONLY £1.00 FOR MY LATEST 'CATALOGUE DISK' which gives details of my FULL RANGE of the great 'PERSISTENCE OF VISION' packed demo disks, Megademos, Super Single Demos, Music Demos, Slideshows, Utilities and more (it even contains a good P.D. game!)
Try these for example.... (All disks D/S)
POV 40 CEBIT '90 (INCREDIBLE 3D GRAPHICS): ZUUL: BLACK WIZARDS
POV 51 FAT BOTTOM GIRLS ('QUEEN'): ROBOCOP 2 DEMO: MR SPOONS DEMO (NOT STE)
POV 62 JELLYBEAN: RED DWARF: 'HEAR THE DRUMMER GET WICKED': PRO-SPRITE ENGINE
S 11 SLAYTANIC CULT 7 (8 original tunes, each with 'horror' picture!)
S 34 STP SLIDESHOW 7...'SCIENCE FICTION'...60 pics!
S 36 THE INVISIBLE MAN/REQUIEM (2 DISKS)...superb 'Queen' sample!
MD 21 DARK SIDE OF THE SPOON...Fantastic Megademo!
MD 30 THE ULTIMATE GFA DEMO... 12 great screens done in pure GFA!
STE 1 STE PRESENTATIONS...4 stunners for the STE!
Prices 1-5 disks £2.50 each. 6-10 disks £2.25 each. Over 10 disks £2.00 each.
Please make cheques, Postal orders payable to D.W. Stables. **FAST SERVICE!**

● **AMIGA** games for sale, Rainbow Islands, £5. Shadow Of The Beast, £5. Back To The Future, £5. All originals. Ring after 7pm. Ask for John. Tel (0724) 859061. Need money as I am upgrading, so hurry!

● **WANTED** Farmplanner and farmcash modules of the Acornsoft farm management system. BBC version. Phone 0600 860761 or 0831 391053.

● **HI-SOFT** power basic sealed unwanted gift, £25. Phone Dave (0705) Portsmouth 552940.

● **ST ORIGINALS** for sale, inc Powermonger, Curse Of The Azure Bonds, Legend Of Faerghail, Battle Master, Yenomorph and Corporation. All boxed with manuals, from £8 to £13. Phone Paul on 0709 898780.

● **AMIGA GAMES** all boxed with manuals, Beast II, Rocket Ranger, Carrier Command, North And South, Defender Of The Crown £5. Pirates £10., and more. Swap possible. Phone Richard (071) 272 7504 evenings.

● **C64 SOFTWARE** on cassette and disk wanted by new owner, word processor and board games, especially wanted. Can any one please help. Lincoln Ohara, 41 Springmill Street, Bradford, West Yorkshire, BD5 7EE.

● **DO YOU HAVE AN ST** upgraded to 1Mb? and need serious software at the right price. I am auctioning business and educational software new, boxed, original SAE for details. Tomlinson, 13 Holme Road, Bingham, Nottinghamshire, NG13 8D2.

● **AMIGA** demos to swap absolutely free, just send a disk with a list or demo on and I'll reply with some disks. Send to: Stuart Sanrey, 67 Mapledene Road, Sheldon, Birmingham, B26 3XE.

● **AMIGA** software, F19 Stealth Fighter M1 Tank Platoon, Fighter Bomber, £12. A-10 Tank Killer, £15. Bomber Mission disk, £7. All boxed as new. Reading. 0734 665842.

● **SOFTWARE** for sale. Platinum Works, D-paint 3, Populous, Sim City, Battle Chess, Their Finest Hour. Nearly £300 worth, all unopened. £140 the lot. Contact Alan 091 5674267.

● **WORD** Star 200 Plus: 51/4" disks, still boxed (originals) will sell for £45. Phone (031) 6637946 (Edinburgh).

● **FREE C64** PD software for details send 35p stamp to Zeons Lairs, 4 Garden Close, Penrith, Cumbria, CA11 7LD.

EXPRESS SALES

Clydeside Shareware

Over 700 Megs! of top quality PC Shareware & Public Domain software. £1.50 (5¼), £2.00 (3½) per full disk! Send SAE for FREE menu driven catalogue to: Ian Tweedie, 50 Ottoline Drive, Troon, Ayrshire, KA10 7AW or Tel: (0292) 313312

Pik'n'Mix System! That is, you choose only the files you want!

● **LARGE** quantity of Amiga and ST originals for sale, from £5. Also Sega Megadrive for sale. Write for list, Amiga PD wanted. Alex, 11 Elizabeth Place, Sompting, West Susses, BN15 9UJ. Phone 0903 767030.

● **AMIGA PD** wanted to swap for list, send SAE and list of you PD and send to A. Hines, 44 School Lane, Eaton Bray, Bedfordshire, LU6 2DT. 100% reply.

● **CONNECT** the ultimate pools system. IBM compatible suits any budget stakes from £1.09 to £50.68. Free infodisk, send 22p stamp, it's effective, you'll wonder how you ever managed without it. Yearly registration, £11.50. B. F. Hallman, 306 Dallow Road, Luton, LUI ITD.

● **6MB PC SHAREWARE** over 750 programs and untilities indexed, archived and checked, only £15 (5.25" or 3.5" disks) please state. Cheque to G. Wight, 7 Valehead, Whitley Bay, Tyne And Wear, NE25 9AY.

● **C64** original software for sale, games, include Turrican 2, Batman The Movie, Creatures and many more good titles. Contact Paul Gumsley, 5 Lockton Road, Whitby, North Yorkshire, YO21 3NB. Games priced from 50p to £4.

● **PC MONTHLY**, a monthly magazine disk packed full with software, news and letters, for more informatin write to: Richard Lillycrop, 19 Nelson Court, Watton, Norfolk, 1P25 6EL.

● **SWAP** Archimedes DR-DOS PC Emulator for MSDOS based PCEMU. Will give cash for your efforts, also wanted Archimedes public domain software. Help also needed with arm machine code. Please phone 0532 869425 and ask for Michael.

● **ROLAND D.5** midi synthesizer ideal for midi sequencing. Hundreds of sounds plus over 64 drum sounds only six months old. Mint condition. £350. 0623 861158.

● **BARGAIN!** A full size key, midi compact keyboard Casio CT470 with AC Adaptor, special music stand, case, keyboard stand, sustain pedal and dust covers, 1 year old. £200. Phone (081) 859 0386.

● **PCW SOFTWARE** wanted to swap, send list to Bob, 11 Nettleford Road, Whalley Range, Manchester 16 M16 8NL.

● **SHARP JC-534** (black) walkman, 3 band graphic equalizer AM, FM, FMST. Radio bands. Dolby N.R.X-bass, auto reverse, play, rew, f.fwd, stop buttons. Sell for £45. 12 months old, in immaculate condition. Please phone (081) 6530642. Ask for Songyow.

● **SEX.** Got your attention didn't it! 2 meg demos needed quickly, also female contacts to swap it with. Send list to John, Flat 45, 2 Silvermere Road, Sheldon, Birmingham, B26 3XA.

286 MOTHERBOARD, 640K, (UPGRADEABLE TO 4M) FULL SIZE CASE, 200 WATT PSU AND KEYBOARD

£139

BULL ELECTRONICS

250 PORTLAND ROAD HOVE SUSSEX BN3 5QT

Access

TELEPHONE ORDERS 0273 203500

VISA

PRICE SUBJECT TO VAT PLUS £2.50 DELIVERY

● **ARCHIMEDES** First Word Plus VII unregistered. £40. Tel: 0733 347302 evenings and weekends. 131 Fletton Avenue, Petersborough, Cambs, PE2 8BY.

● **NEW PD** compilation disks for the Atari ST/E. Send SAE for details or £2.50 for a disk stating disk number (1-5). Cheques/P.O. to: A. Burns, 61 Coniston Road, Gunthorpe, Petersborough, PE4 6UL.

● **ST AND AMIGA** games for sale. Send to Jim Parish, 1 Poogner Road, Ludlow, Shropshire. Send for list. ST games Vic, Italian 90, Hard Driving. Have quite alot for the Amiga. Please send SAE!

● **WANTED** Bards Tale II (ST). Cash waiting. Contact Steve Warner, 3 Bolton Street, Ramsgate, Kent.

◆ OTHER

● **PSION** model CM personal organiser, basic model, still boxed, with manual, unused. £45. Tel : 0432 266141.

● **OLIVETTI M200,** 720K disk drive, 20 Megabyte hard drive, excellent condtion, boxed with original manuals and disks, hard disk packed to overflowing with Archived shareware, £600. Contact David (091) 4384684.

● **DARK OAK ANTIQUE** style computer desk, top size 55 3/4" x 36" 3 drawers brass fittings full cable access throughout, ideal for office or home. Complete with 2 matching side tables. £250 o.n.o. Tel 037 977 285.

● **PCW8256** for sale, loadsa software, buyer must collect. Price £300. Write to Stuart Woodhead, 390 Coulsdon, Surrey, CR5 IEF.

● **FAL DISCO** system for sale speakers 100 watt light screen, fuzz light £275, no offfers. Ring 021 554 6562.

● **AMIGA/ATARI** ST mouse/joystick switch auto £18 new. Manual £16. Dust cover £4. 6" long mouse/joystick, extension leads £5 pair. Scart Sharper £15. Ergostick £16. Konix auto/fire speedking £10. Can post. Neil, 051 4260138.

● **YAMAHA** PSS-780 midi keyboard, including manual, mains adaptor, portable stand, tutor books with cassette £125 o.n.o Also Datel midi 64/128 interface with cables and advanced music system, cost £40. Accept £20. Mint condition. Tel (0625) 827033.

● **COMMODORE** disk user magazines Nov/Dec 87 April 91 (28 issues) with disks. £35, includes p+p. Please write to: Stephen, 8 Roddens Gardens, Castleagh, Belfast, BT5 7JJ or phone (0232) 798559.

● **YOUR COMPUTER** magazines, December 1982 to Deceber 1983, offers. 0925 860179 (Warrington).

● **ALL SINGING**, all dancing Akai video, exchange or part exchange for Amiga gear. Modem, hard drive, sampler, 24PIN colour printer or what have you to offer. Phone Steve 0782 612393.

● **ATARI** STFM with mouse, mat, dust covers, £350+ of games, also business softwre. (GFA Draft plus, First Word Plus VIP Professional), books and Yamaha DD10 drum bank, new. £300. Phone Mark. 081 6890801. A giveaway.

● **PORTABLE** Tandy 102 computer with manuals (including technical reference), leads, case, and software which includes games, RS232, printer, tape and joystick interfaces, good condition. £230. Tel: 0962 885216.

● **LAST RAMPAGE** PS/2 8 meg memory upgrade board (unopened), new £30. o.n.o. Everex Majic 1/0 clock calandar, Serial Parallel card, as new. £25. Phone Pete (0322) 662747. Swanley.

● **SORT OUT!** Two 8" disk drives internal £10 each or £15 pair. Racal Milgo external modem £15. VTX 5000 modem for the Spectrum, boxed with all leads. £15. Tel 0444 450454. Also wanted CPU case.

● **I WANT** to swap my Spectrum +2 + £120 + software for an Amiga with just a powerpack. Write to Terry JR at: 71 Napier Road, Ponders End, Enfield, EN3 4QS.

● **WANTED** Fury Dice to hang on my 486 VGA computer or one of those men that do moonies in the Window of cars (Boss thinks they are naff). Call Tom James. 071 976 1040 Office hours.

● **RECORDS FOR SALE**, very cheap, for free information. Send a SAE to Luke Palmer, 27 Stanmer Villas, Brighton, Sussex, BN1 7HQ. Today! Replies to all enquires.

● **SINCLAIR QL** with Quill, Abacus, Archive + easel plus books covering the full use of programs + Centronics printer interface. Boxed and in excellent condition. £75. Contact Neil 0425 616605.

Clocktower 081 - 341 9023

84a Weston Park, Crouch End, London, N8 9PP
Callers welcome, but please phone first
Mail order service available

MACINTOSH & APPLE II

ENHANCEMENTS - HARDWARE - SOFTWARE NEW AND USED. REPAIR SERVICE AVAILABLE

APPLIED ENGINEERING AUTHORISED DEALER

- IIGS products
- Memory
- Drives
- Blueprint
- Toners
- Ribbons
- Accelerators
- Modems
- Monitors
- Printers
- Syquest & cartridges
- TimeOut
- Beagle Bros
- Batteries
- Zip Chips
- Cirtech
- Free Tools Ass.
- Prosel 16 & 8
- Fax Machines
- Paper
- Power supplies
- Spares
- Deskjet supplies

● **WANTED** Z88, must be working condition, otherwise condition unimportant. Bucks area. Please ring 0844 291683.

● **SHARP** MZ-80A, owners please help! Have bought above computer, but have no tapes, you help with copies? Hament. 0797 223124.

● **AMSTRAD** PCW 8256 plus extra memory. Excellent condition, 14 disks including DTP, Supercalc 2, Silicon Dreams (Adventure) Catch 23 (3D Arcade) Recently overhauled printer. Excellent reference book, £265. Buyer collects. (0924) 496745 after 6pm.

● **JACK** Nickalaus Unlimited Golf and Course Design, plus 4 disks with 11 courses, £16 or will swap for Pools, Predictor Program or Headcoach. Tel 0752 892910.

● **MAXAFIT** precision paper guide, fits most printers. £12. Microsoft interactive basic compiler v1.23 (Atari) £25. Quantum Paint v2.0 with professional tool kit, plus Funface £12, or will swap above items for PC software. Tel 081 889 4276.

● **PANASONIC 2/3"** monochrome camera. New tube type fitted. Ideal for digitiser, comes complete with lense. Yours for only £50 o.n.o. Call Alan (0705) 691103 evenings.

● **PSION** organiser software for sale and exchange on disk or datapak. Phone 081 540 6271 for list. Evenings.

● **SHARP 1Q-7200** organiser with leather case and manual. £100. Telephone 0533 620614.

● **BBC Z80** second processor software and manuals still in box. £100. Tel 0744 52468.

● **SOFTWARE** packaging. Black plastic softcases with clear inlay sleave, for packaging 3.5" or 5.25" disks. Only 30p each, or £25 for 100 (price excludes p+p). For further information telephone Brett on (021) 749 5117, after 7pm.

● **BARGAIN!** Casio CT-470 keyboard full size keys, 220 sounds, 110 beats bundled with power adaptor, professional keyboard stand, music stand, dust covers, Carry case. Only 1 year old, only £200. Phone Richard (081) 859 0386.

● **OLYMPUS OM-40** camera outfit with standard lens, 28-70mm Macro Zoom, Winder 2, Motor Drive, T-20 Flash, various Filters, Guardsman bag. £225 o.n.o. or swap for ST hardware, (scanner, digitiser, sampler, SM124/5). Tel 0275 375496.

RZF SYSTEMS

SuperLITE 386SX - 20 Notebook

£1399 plus VAT

* 80386SX - 20Mhz * 1Mb RAM expandable to 5Mb * LIM EMS 4.0 support * 40Mb Hard Disk * 1.44Mb Floppy drive * 83 Key Keyboard * LCD 640 x 480 VGA 16 grey scale ext monitor port * One Parallel, 2 serial, AT Keyboard port * 305x282x56mm 8lbs (3.6Kg) * Mains/rechargable battery * MS-DOS 4.01 & carry case inc. * Options inc. car adapter, ext. 5.25" FDD, battery pack & ext. battery charger * 80387 co-processor

13 Camley Park Drive, Maidenhead, Berks, SL6 6QF
Tel: (0628) 21535 Mobile: (0836) 321658 Fax: (0628) 773562

● **FULL** size Hi-Fi: including TR10 Kenwood KA-990v 110 watt amplifier. Denon DR-M20, 3 head cassette deck. Aiwa F770, 3 head deck. Denon PCM compact disk player. Total £1200. Sell for £350. 0422 378662. West Yorkshire.

● **HELP!** STFM keyboard faulty, does anyone know whats wrong how to fix it, will pay reasonable fee. Mel, 38 Knype Way, Bradwell, Newcastle, Staffs, STS 8JL.

● **ATARI** 7800 console £50. As new Oric 1 £30. Casio CZ2305 Synth £60. Midi compatible all o.n.o. or swap for Amiga hardware. Tel 0780 721 806. Buyer collects.

● **C64 + AMIGA** owners take note, September 88, February 89 + May 89 to February 90, issues of 'Commodore User Amiga. 64' only 85p each or £10 the lot. Cheaper to buy than C.U. back issue service. Write or phone after 5pm. All very good condition. Tel 0382 76755

● **SONY XVT500** digital video super imposer, brand new, unused, still boxed, cost new. £500. Unwanted gift. Accept £190 o.n.o. Tel 0775 840664.

● **NEW COMPUTER EXPRESS** back issues 53-58, 61-63, 71, 73-85 and 88-90. Will conside splitting. Phone 0925 860179. (Warrington) with offers.

EXPRESS SALES

PC SHAREWARE

Over 9000 US based programs at only £2.35 inc VAT per Disk.

Adventure, Card, Arcade, Board Games, Spread Sheets, D Base, W/Processors, Graphics, Animation and lots more.

Send £1.50 + 50p Post & Packing for Catalogue Disk stating 5¼" or 3½" payable to:

COMPUTER GAMES SHOP,
UNIT 1, CENTRAL MARKET, SCARROTS
LANE, NEWPORT, ISLE OF WIGHT PO301JD
TEL: 0983 821222

● **TECHNICAL** workshop manuals for 3.5 inch disk drives, both DD and HD types, including connector details, internal links, dipo switch settings etc. For Chinnon, Teac, Mitsubishi, Citizen and Sony drives. £5 each. Phone 0493 441394 evenings.

● **SWAP** CBM 64 and Casio Synth for Amiga hardware, best offer gets both. Sorry but you will have to collect. Tel Stampford (Lincs) 0780 721 806 after 6pm. Ask for Glyn.

● **YAMAHA** keyboard, 100 voices, 100 rhythms, 49 keys, midi in out model, PSS-580. Cost £169.95, sell £70. Ideal for ST Amiga incs midi leads, power supply. All voices can be custom edited. Deliver 5 miles of Cardiff. (0222) 239102 after 7pm.

● **AMSTRAD** 9512 printer, faulty, however any parallel printer will work. Disks, manuals incl. £225 o.n.o. Not working Amstrad 8256. £40 o.n.o. Tel 0727 837793.

● **YAMAHA** PSS-780 keyboard inc, two music tutor books and tape mains adaptor and midi connecting leads, only £150. Tel 061 790 8882.

● **ARCHIMEDES** A300 2Mb RAM midi card, mint condition. £575. Programmers reference manuals. £55. Roland MT-32. £200. Contact Andy. Tel 0274 630541.

● **EPSON** PX8 notebook sze CP/M computer wordstar on Rom, 8 hrs on recharge with case charger etc. £49 o.n.o. 0704 66485.

● **GUILLOTINE** able to cut 1 ream ata time. Must work and be very cheap. Local only please. W. Yorks. Tel 0484 650452 Huddersfield.

● **CLIP ART** (PD) for the Atari ST and PC compatibles, 700K of IMG Format clip art per disk (£1) for catalogue send £1or disk + SAE to 8 College Road, Blandford Camp, Blandford Forum, Dorset, DT11 8BE.

● **MAINS** filter module, 6 amp, £6. Currah Commodore C64 Speech Synthesizer £9.50. Prism modem (Acoustic compiler, P.S.U., tape cassette). Suitable BBC micro. £15. Tel 0703 221115 (Southampton).

● **ESDI** hard drive and 386DX 24MHz co-processor wanted. Tel: 0253 891517 anytime.

● **WANTED** Amiga Fred Fish PD disks, earn yourself some blank disks in supplying me with these. Tel Gary. 0473 713715 between 6-9pm only.

● **PSION** Organiser II LZ64, 32K datapak, blank, pocket speadsheet 1-2-3 compatible. All boxed with manuals, good condition. £100 will not split. Tel 031 3378139.

WANtED Dead QL or QL Outfit. Tel 0760 755402.

● **ATARI** mouse, brand new, unused. £15. Phone 081 4229099.

● **ARCHIMEDES** hardware and software sale, I.O. Podule with Midi Atomwide Prototype card Econet PC Emulator Arc PCD, Arcwriter. All half price or consider swap for impression. Ring Rob. 0203 367283.

● **WANTED:** Photon Storm for the Amiga. Contact Mike Ball, 1 Wyndale Drive, Syston, Leicester, LE7 8LR. You know it makes sense!

● **AMX MOUSE** + Stop Press for CPC, boxed as new, £40 o.n.o. Assorted CPC books, worth £35 + some magazines, £15 o.n.o. Andrew Stewart. (099382) 3325 (Oxon).

● **CONSULTANCY** services offered systems implementation undertaken in C, Pascal, Cobol, Assembler, Oracle, ADA, Database III DOS and Unix supported. Call to discuss requirements. Lee McAllister on 081 519 8568.

● **DRAWINGS** plotted send H/P7475A Compatible O/P files Amiga, ST, IBM720K state A4/A3, A3 £2., A4 £1.50. Also printouts draft 15p/page 24PIN LQ. 30p/page + 50p p+p. Send to Mr. S. Smith, 46 Willingham Road, Knaith Park, Lincs, DN21 5ES.

● **2"SONY** PD1, 5 new sealed. £15. Phone 0489 578634.

● **SOZOBON** C ST help disk, information to get you started. Send blank disk and stamp (or £1) to: Les Bessant, 188 Brinkburn Avenue, Gates head, Tyne and Wear, NE8 4JX, or send SAE for list of ST games.

● **WANTED** PSU for Commodore 128 in working order. Also 1541 or 1571 disk drive. Reasonable price paid. Phone 081 517 6772, evenings.

● **IMB** Simm RAM and 80n/s 4Mb SImm RAM 80n/s 19" rack CGA monitor IGB + hard drives. Also goodies for SAE or part exchange. Tel 0860 891893. BBS 0905 754127.

● **PSION** organiser CM for sale, £45. Also pile of computer magazines, open to offers. Phone Bristol, 0272 825702.

SHARP ZQ 5200 personal organiser. Will pay £50 if proof of one owner, must be in very good condition. Tel 0928 88942.

YAMAHA T8IZ Multi Timbrall Rack Synth inc' Atari 520 edit S.W. great midi music SW. Tel 0723 362440 after 6pm. £195 o.n.o

● **CORDLESS** telephones - two units with handsets and base units require slight attention. £30 for both units. Tel 061 790 8882.

● **CUMANA,** 40/80 track, double sided, 51/4' disk drive with Shugart connector. Perfect working order. Sell for £55 o.n.o. or swap for external 31/2" Amiga drive. Call (0737) 244792. Ask for Matthew.

● **PRENTICE HALL,** case studios in systematic software development, principles of concurrent and distributed programming. Sensible offers please, 0489 57863

● **SWAP** ST Syncro Express 2 for anything, useful. Tel Phil (091) 3853800.

● **SWAP** my Casio digital diary 32K memory (cost £70). For your Atari Lynx. Will make small cash adjustment. Tel Phil (091) 3853800.

● **PSION** Organiser II model XP, never used, unwanted gift, mint condition, plus using and programming the Psion book. No split, £100. 0925 225422. Paul Wilson.

● **SWAP** DEC Rainbow PC100+ computer and printer, including software and manuals for A4 Sinclair or will sell for £200. Phone 081 948 3300.

● **WANTED** pages from Amiga Power issues one and two with guide to Rainbow Islands. Will pay £1 for both. Write: Jeremy Longley, 3 Woodlands Road, Tonbridge, Kent, TN9 2NE.

● **SPECIALIST** speakers pair of IMF electronic KEF Concerto units. Bargain at £300. Phone Leceister 0533 787274.

● **BLANK** disks, I have a hundred high density or DS/DD Sony disks 50p each or 10 for £4.50. Send requests to M Jacques, 8 Paisley House, Kershaw Street, Laisterdyke, Bradford, BD3 8PA.

BINARY ZONE PD

- Mindnumbingly Splendid C64 Disk PD! -

We stock only the very best PD on disk for the CBM 64 including the very latest demo releases and all the classic titles as well as PD Games, Utilities, Music demos etc etc.

Each demo disk is full to capacity and costs only £1.50!!

Now you can find out what your '64 can really do by writing now for a full catalogue. (Please send a 1st class stamp!)

You are also entitled to a FREE DISK with your first order!

BINARY ZONE PD
34 Portland Road, Droitwich, Worcestershire. WR9 7QW.
PLEASE NOTE OUR NEW ADDRESS ABOVE

● **YAMAHA** PSS-680 workstation full midi in/out thru programmable drum machine, built in effects, 61 keys, drum pads, complete with manuals, boxed. £100. 071 9376493 evenings. Peter. Kensington.

● **I FIX JOYSTICKS** and the like. Small fee, payment need not be money! Also Amiga demos for swapping and custom made workbench to suit your needs! 0476 65739, ask for Ben.

● **TWO** Apple II colour computer, one perfect, one needs heads cleaning, but works. Price includes extra D/D, software, manuals, printer card. Also Apple II Emulator. Everything £150. Tel Southampton. 0703 221115 or 20 Shirley Towers, Shirley, Southampton.

● **FOR SALE** Yamaha PSS 780 midi compatible keyboard plus midi leads ins. etc. 100 voices, 100 styles etc. 6 months old, very good condition. £80 for quick sale, p+p included. Ring Simon 0904 625016.

● **SWAP** K Mount SLR camera 28-200m lens for Apricot XEN min config ZFDD or F10, wanted small screen colour monitor. Phone Mike Volsing. 0480 74551 daytime 0480 75036 after 7pm.

● **WANTED** writers and programmers for ST magazine. All voluntary contributions of articles or programs included on disk/paper based magazine. Write for details to: Andrew Betts, The Mount, Wood Lane, Gallowstree Common, Reading, Berks, RG4 9BG.

---

diskzine to hit the ST. No need for blank disks. Send £2 to Steven McCarron, 1,571 Dumbarton Road, Scotstown, Glasgow G14 9XE.

● APOCALYPSE – Disk version of Apocalypse fanzine, featuring extra programs. Send 50p, 5.25-inch disk and SAE to D B Read, 276 Burton Road, Midway, Swadlincote, Derbyshire DE11 7LY.

USER GROUPS

● AMIGA PUBLIC DOMAIN EXCHANGE GROUP – Free PD for a low lifetime membership. Send SAE for for information to 34 Paston Road Munoesley, Norwich, Norfolk NR11 8BW.

● TOTAL SOFTWARE EXCHANGE – Buy/sell/swap software for all computers. Write to TSE, PO Box 32, Wallasey, Merseyside L44 1ES or phone 051-691 0072.

● THE ADVENTURE 8 STRATEGY CLUB – Interested in Adventure, strategy RPG, simulations, helplines, solutions covering all formats? Please send SAE to The Adventure 8 Strategy Club, 17

Craven Road, Hemsworth, West Yorks WF9 4SB. Enclose SAE.

● CLYDESIDE SHAREWARE – 900 megs to choose from!!! Clydeside Shareware PD and Shareware for PCs from £1.50 for a full disk. Write to Ian Tweedie, 50 Ottoline Drive, Troon KA10 7AW. Tel: 0292 313312.

● DYNAMIX PD – PC, Amiga and C64 Public Domain. All new and best titles. For free detals contact 132 Springwood, Llanedeyrn, Cardiff CF2 6UF. SAE appreciated.

● EDLIB – Interactive, educational and productivity compilations of PD for Amiga. £1.50. All regular PD only 89p. Graphics Master 1 and 2, graphic image manipulation PD software at only £3. Contact Edlib, Scotland Farm, Stockwood Road, Brislington, Bristol BS4 5LU.

● L & D PD – Amiga PD from 35p per disk. Monthly competition to win PD of your choice. Also a new digitising service is available. For info send SAE and disk to L & D PD, 10 Hornbean Green, Pontefract, West Yorks WF8 2DX.

512

AMSTRAD BUSINESS USERS – Amstrad Professional User Club, Enterprise House PO BOX 10, Roper Street, Pallion Industrial Estate, Sunderland SR4 6SN. Tel 091-510 8787

APPLE MACINTOSH. John Lewis, Macintosh user group, Macintosh House, 11 South Parade, Summertown, Oxford OX2 7JL

APPLE SYSTEMS – Irene Flaxman, Apple 2000, PO Box 3, Liverpool L21 8PY.

ARABIC COMPUTING – Rich Lackey, Arabits, 9 Bellview Road, Worthing, West Sussex BN13 1EY

ATARI AND ST PC EMULATOR SUPPORT CLUB – SAE to 153 Parrock Street, Gravesend, Kent, DA12 1ER

ATARI ST/STE HELPLINE – We can scan, digitalise and provide loads of clip art. SAE to Nist 53, Lenaghan Park, Belfast, BT8 4JB

ATARI ST USERS ASSOCIATION – provides support for all Atari ST/E users. Also exclusive PD library for members. Write to ASTUA, 18 Poplar Close, Biggleswade, Beds, SG18 OEW

B

BBC MICRO - BEEBUG, 117 Hatfield Road, St Albans, Herts AL1 4JS. 0727 40303

BATPUG – Turbo Pascal user group also open to other PC Pascal programmers. Costs

The largest Archimedes User Group in London!. 081-445 2126.

COBOL LANGUAGE - Allen Reavie 22 Mourneview St, Portadown, Northern Ireland. BT62 3AW

COLECO ADAM - Keith Mamer, UKAS 33 Homer Road, Croydon CXR0 7SB

COMMODORE 64 CLUB – For more details send an SAE to The C64 Club, 20 Finlow Place, Dundee, Scotland

COMMODORE AMIGA – UK Amiga Users Group. Contact 144 Charles Street, Leicester LE2 00D. Tel 0533 510066 voice; 0533 517615

COMMUNITY COMPUTING - Community Computing Network 2nd Floor, 35 Pink Lane, Newcastle, NE1 5DW. Tel 091-261 0317

COMPUCORP. Compucorp University users group c/o Compucorp, Cunningham House, Westfield Lan, Kenton, Middx

COMPUNET – Write to Independent Compunet Club, 148 Furzehill road, Boreham Wood Herts. WD6 2DX

CPM & MSDOS Users Group – 42 Birkbeck Road, Wimbeldon, London SW19 9NZ. Tel 081-543 0824

CRYPTOGRAPHY & CODES - Mike Barlow, American Cryptogram Association 5052 Chestnut Avenue, Pierrefonds, Quebec HBZ 2A8 Canada

TEL; 061
773 3897
Ext 21

BANKHOUSE

Old Co-op Bldg, Warwick Street, Prestwich
Manchester. M25 7HN

FAX; 061
773 0140

LEISURE

ATARI

Discovery STFM 8 titles	£215
Turbo STE Joy/12 titles	£265
Family 1040 STE 8 titles	£305
Lynx Game System	£74
Portfolio	£156

AMIGA

Screen Gems	£309
Class 90's/1st Step	£390
10 Astro Game Pack	£37

Disk Drives, Monitors,
Emulators, As Available
Phone for details

FAX'S

Amstrad 960AT	£529
Amstrad FX5000	£339
Brother 160	£339
Toshiba TF102	£389
Toshiba TF232	£508

SPECIAL BUSINESS PACKAGE

Goldstar 386, 40HD, 1Mb Colour VGA, Software, 1 MT 81 24 pin printer including sheet feeder, cables, on site maintenance

£820 While stocks last

PORTABILITY SPECIAL

Hyundai LT3 286 1Mb RAM 20Mb HD Including Canon

SEGA

Mega Drive	£119
Game Gear	£79
Master System	£49
Master System Plus	£64

Wide variety of Games Available

DISKS

Unbranded ea	10	100	250
350k DSDD	40p	30p	25p
720k DSDD	50p	40p	32p
1.2Mb DSHD	65p	55p	45p
1.4Mb DSHD	1.00	80p	45p

FREE Labels & Disk Boxes

LASERS

Brother HL4	£719
Brother HL4PS	£1189
Brother HL8E	£989
Brother HL8V	£1079
Brother HL8PS	£1489
Canon LPB4	£695
Canon LP8III	£1097
Canon LP8IIIT	£1487
HP LJIII	£1000
HP LJIII D	£1609
Panasonic KXP4420	£675
Panasonic KXP4450i	£1100
Panasonic KXP4455	£1650
MT904	£699
MT905	£759
MT906	£829
MT911	£1099

AUTHORISED DEALERS
for Apricot, Everex, MT,
Novell and many more
Phone for Details

AMSTRAD

GEM 3.	12MD	14CD	14HR
3086SD	421	499	578
3086DD	460	538	617
3086HD	617	538	774
3286SD	499	578	656
3286HD40	734	813	891

PCW8256	£289
PCW8512	£439
PCW9512	£479
ALT386	£1559
ALT286	£1274

PORTABLES

TOSHIBA

T1000SE	£472
T1000XE	£626
T1000LE	£941
T2100XE 20	£1130
T1200XE 40	£1256
T2000SX 20	£1669
T3100e 20	£1256
T3100e 40	£1511
T3200SX 40	£2264
T3200CSX	£4217
Hyundai 286	£625
Hyundai 386	£1199

(with free carry case & file t/fer software)

Commodore CLT	£1025
Phillips PCL101	£449
Phillips PCL203	£1275

PRINTERS

MT81	£109
MT82	£259
Citizen 120D	£110
LX400	£135
LX850	£199

CANON
BJ10e
£205

SOFTWARE

Autoroute Plus	£202
Corel Draw 2.0	£299
Framework III	£348
Harvard Graphics	£279
Laplink III	£79
Lotus Agenda	£259
Lotus Works	£105
Lotus 123	£315
Norton Utilities	£108
Microsoft Works	£120
MS Quick BASIC	£59
Paradox 386	£347
PC Tools V6	£89
Smartware II	£414
Superbase 4 V1.2	£349
Supercalc 5	£79
Wordperfect 5.1	£279
Wordstar V6	£229
Windows 3.0	£75
Word Window	£299

MISC

SWITCHES
DATA CARTRIDGES
TAPE UNITS
MICE UPS TONERS
CARTRIDGES
FAX PAPER

Petersborough, Cambs, PE2 8BY.

● **NEW PD** compilation disks for the Atari ST/E. Send SAE for details or £2.50 for a disk stating disk number (1-5). Cheques/P.O. to: A. Burns, 61 Coniston Road, Gunthorpe, Petersborough, PE4 6UL.

● **ST AND AMIGA** games for sale. Send to Jim Parish, 1 Poogner Road, Ludlow, Shropshire. Send for list. ST games Vic, Italian 90, Hard Driving. Have quite alot for the Amiga. Please send SAE!

● **WANTED** Bards Tale II (ST). Cash waiting. Contact Steve Warner, 3 Bolton Street, Ramsgate, Kent.

◆ OTHER

● **PSION** model CM personal organiser, basic model, still boxed, with manual, unused. £45. Tel : 0432 266141.

● **OLIVETTI M200,** 720K disk drive, 20 Megabyte hard drive, excellent condtion, boxed with original manuals and disks, hard disk packed to overflowing with Archived shareware, £600. Contact David (091) 4384684.

● **DARK OAK ANTIQUE** style computer desk, top size 55 3/4" x 36" 3 drawers brass fittings full cable access throughout, ideal for office or home. Complete with 2 matching side tables. £250 o.n.o. Tel 037 977 285.

● **PCW8256** for sale, loadsa software, buyer must collect. Price £300. Write to Stuart Woodhead, 390 Coulsdon, Surrey, CR5 IEF.

● **AMIGA/ATARI** ST mouse/joystick switch auto £18 new. Manual £16. Dust cover £4. 6" long mouse/joystick, extension leads £5 pair. Scart Sharper £15. Ergostick £16. Konix auto/fire speedking £10. Can post. Neil, 051 4260138.

● **YAMAHA** PSS-780 midi keyboard, including manual, mains adaptor, portable stand, tutor books with cassette £125 o.n.o Also Datel midi 64/128 interface with cables and advanced music system, cost £40. Accept £20. Mint condition. Tel (0625) 827033.

● **COMMODORE** disk user magazines Nov/Dec 87 April 91 (28 issues) with disks. £35, includes p+p. Please write to: Stephen, 8 Roddens Gardens, Castleagh, Belfast, BT5 7JJ or phone (0232) 798559.

● **YOUR COMPUTER** magazines, December 1982 to Deceber 1983, offers. 0925 860179 (Warrington).

● **ALL SINGING**, all dancing Akai video, exchange or part exchange for Amiga gear. Modem, hard drive, sampler, 24PIN colour printer or what have you to offer. Phone Steve 0782 612393.

● **ATARI** STFM with mouse, mat, dust covers, £350+ of games, also business softwre. (GFA Draft plus, First Word Plus VIP Professional), books and Yamaha DD10 drum bank, new. £300. Phone Mark. 081 6890801. A giveaway.

● **PORTABLE** Tandy 102 computer with manuals (including technical reference), leads, case, and software which includes games, RS232, printer, tape and joystick interfaces, good condition. £230. Tel: 0962 885216.

SuperLITE 386SX - 20 Notebook

£1399 plus VAT

* 80386SX - 20Mhz * 1Mb RAM expandable to 5Mb * LIM EMS 4.0 support * 40Mb Hard Disk * 1.44Mb Floppy drive * 83 Key Keyboard * LCD 640 x 480 VGA 16 grey scale ext monitor port * One Parallel, 2 serial, AT Keyboard port * 305x282x56mm 8lbs (3.6Kg) * Mains/rechargable battery * MS-DOS 4.01 & carry case inc. * Options inc. car adapter, ext. 5.25" FDD, battery pack & ext. battery charger * 80387 co-processor

13 Camley Park Drive, Maidenhead, Berks, SL6 6QF
Tel: (0628) 21535 Mobile: (0836) 321658 Fax: (0628) 773562

● **FULL** size Hi-Fi: including TR10 Kenwood KA-990v 110 watt amplifier. Denon DR-M20, 3 head cassette deck. Aiwa F770, 3 head deck. Denon PCM compact disk player. Total £1200. Sell for £350. 0422 378662. West Yorkshire.

● **HELP!** STFM keyboard faulty, does anyone know whats wrong how to fix it, will pay reasonable fee. Mel, 38 Knype Way, Bradwell, Newcastle, Staffs, STS 8JL.

● **ATARI** 7800 console £50. As new Oric 1 £30. Casio CZ2305 Synth £60. Midi compatible all o.n.o. or swap for Amiga hardware. Tel 0780 721 806. Buyer collects.

● **C64 + AMIGA** owners take note, September 88, February 89 + May 89 to February 90, issues of 'Commodore User Amiga. 64' only 85p each or £10 the lot. Cheaper to buy than C.U. back issue service. Write or phone after 5pm. All very good condition. Tel 0382 76755

● **SONY XVT500** digital video super imposer, brand new, unused, still boxed, cost new. £500. Unwanted gift. Accept £190 o.n.o. Tel 0775 840664.

● **NEW COMPUTER EXPRESS** back issues 53-58, 61-63, 71, 73-85 and 88-90. Will conside splitting. Phone 0925 860179. (Warrington) with offers.

EXPRESS ON-LINE

The *Express* guide to the non-commercial side of computing featuring a complete User Group listing

EXPRESS IS NOW ON-LINE!

Join the *Express* conferences on ASPECTS (061-792 0260) and CIX (081-399 5252)

NEW ARRIVALS ON-LINE

BULLETIN BOARDS

● THE SILVER LINK – 24 hours, 300-14400 baud, HST/V32/MNP/V42bis, plenty of file and message areas for most machines. Worldwide networking. No fees. Call 0952 641724. Also running the NCE conference.

● SANCTUARY BBS – on 0329 236612. V21/V22/V22bis/HST. Avalable 24 hours a day. File and message areas for PC and Amiga.

● ON-LINE ENTERTAINMENT LTD – Multiplayer games running award winning Federation. Air Warrior, US multi-player 3-D flight simulation, coming soon. Call 081-539 6763. 8-N-1, V21/V22/V22bis/V23.

● THE PHOENIX – 0101 309 833 4368. International callers have free access rights.

● WIZARD BBS – The small BBS now caters for Amiga owners as well as IBM. Most speeds up to 2400 plus MNP. On-line 5pm-9am weekdays and 24 hours at weekends. Call 0703 702427 now! (Well after 5pm, actually).

FANZINES

● STUD – The ST users disk. Crammed full of programs on every subject. SEnd £1.50 to Shane Rodwell, 19 Collings Place, Newmarket, Suffolk CB8 OEX for Stud #1.

● ST DISKBOX – This is the latest diskzine to hit the ST. No need for blank disks. Send £2 to Steven McCarron, 1,571 Dumbarton Road, Scotstown, Glasgow G14 9XE.

● APOCALYPSE – Disk version of Apocalypse fanzine, featuring extra programs. Send 50p, 5.25-inch disk and SAE to D B Read, 276 Burton Road, Midway, Swadlincote, Derbyshire DE11 7LY.

USER GROUPS

● AMIGA PUBLIC DOMAIN EXCHANGE GROUP – Free PD for a low lifetime membership. Send SAE for for information to 34 Paston Road Munoesley, Norwich, Norfolk NR11 8BW.

● TOTAL SOFTWARE EXCHANGE – Buy/sell/swap software for all computers. Write to TSE, PO Box 32, Wallasey, Merseyside L44 1ES or phone 051-691 0072.

● THE ADVENTURE 8 STRATEGY CLUB – Interested in Adventure, strategy RPG, simulations, helplines, solutions covering all formats? Please send SAE to The Adventure 8 Strategy Club, 17 Sheridan Road, London E12 6QT.

● EDINBURGH AMIGA USER GROUP – For more details write to Neil McCrae, 37 Kingsknowe Road North, Edinburgh EH14 2DE or phone 031-443 6234 Monday to Friday 7-9pm.

● TRIVIA LEAGUE – Why not enter a team for the Trivia League. It's free. It's fun. Just send an SAE with your team name for sample questions to 86 Meiklerig Crescent, Pollock, Glasgow G53 5UF.

● AMSTRAD PCW CLUB – Meets monthly in Ealing, London W7 and welcomes experienced PCW users and beginners. Details from Tony Brown on 081-841 3666.

PD

● ANDRIKKOS PC LIBRARY – Greetings earhlings! Andy Kyriacau has PC Shareware from 20p per program. Send stamp for Data to 17, Parkhurst Road, London N22 4JQ. 081-881 1696.

● SHAREWARE/PD – Windows, clip art and GIF Shareware for PC. Send disk and SAE for list to t Wishart, 3 Berwick Road, Port Glasson PA14 5QN.

● ADPD – For the cheapest Amiga PD around, some even free. Send SAE for details or disk for lists. 15 Deanes Close, Dovercourt, Essex CO12 4JH.

● LARD PD – Only 95p per disk. Amiga only. For catalogue write to Lard PD, 41 Craven Road, Hemsworth, West Yorks WF9 4SB. Enclose SAE.

● CLYDESIDE SHAREWARE – 900 megs to choose from!!! Clydeside Shareware PD and Shareware for PCs from £1.50 for a full disk. Write to Ian Tweedie, 50 Ottoline Drive, Troon KA10 7AW. Tel: 0292 313312.

● DYNAMIX PD – PC, Amiga and C64 Public Domain. All new and best titles. For free detals contact 132 Springwood, Llanedeyrn, Cardiff CF2 6UF. SAE appreciated.

● EDLIB – Interactive, educational and productivity compilations of PD for Amiga. £1.50. All regular PD only 89p. Graphics Master 1 and 2, graphic image manipulation PD software at only £3. Contact Edlib, Scotland Farm, Stockwood Road, Brislington, Bristol BS4 5LU.

● L & D PD – Amiga PD from 35p per disk. Monthly competition to win PD of your choice. Also a new digitising service is available. For info send SAE and disk to L & D PD, 10 Hornbean Green, Pontefract, West Yorks WF8 2DX.

USER GROUPS A-Z

A

ABC AMIGA BEGINNERS' CLUB – More info in beginners' pack. Send £1.50 to Ian, 110 Whitehill Park, Limavady, Co Londonderry, N.Ireland, BT49 0QG. Tel: 0504 765174

ACORN ARCHIMEDES.RISC USER 117 Hatfield Road, St Albans, Herts.

ACORN ARCHIMEDES Archive, 18 Mile End Road, Norwich NR4 7Q

AMATEUR RADIO (CBM) – Simon Lewis GM4PLM Commodore Radio Usrs Group, 69 Irvine Drive, North Clippens, Linwood, Paisley

AMIGA HELP CENTRE – A group to help novices. For CLI help disk and registration send £10 to Simdev, 29 Avon Square, Hemel Hempstead, Herts.

AMIGA HELPLINE SERVICES – Free club for young and old. Send SAE toG Keenan, 21 Skirsa Place, Glasgow.

THE AMIGA TEAM – A group to help novices. Help given in programming – Assembly, BASIC, C, Logo, Pascal and CLI. For registration and introduction pack send £10 to 11 Beech Grove, Northallerton, North Yorks, DL6 1JY

AMSTRAD BUSINESS USERS - Amstrad Professional User Club, Enterprise House PO BOX 10, Roper St, Pallion Ind Estate, Sunderland SR4 6SN. Tel 091-510 8787

AMSTRAD CPC USERS - Tony Baker, United Amstrad User Group, 26 Uplands Crescent, Fareham, Hants PO16 7JY. Tel 0329 234 291

AMSTRAD CPC HOME USERS – Steve Williams, WACCI, 9 South Close, Twickenham TW2 5JE. Tel 081-898 1090

AMSTRAD LOCAL GROUPS - Contact the Amstrad Groups Federation, 4 Sutton Road, Gorton, Manchester

AMSTRAD PC SOFTWARE - Colin Smith, Colbar, 10 Penwood close, Westbury, Wilts BA13

AMSTRAD 1512/1640/PPC - PC Independent User Group, The Computer Advice Centre 87 High Street, Tonbridge, Kent. Phone 0732 771 512

AMSTRAD BUSINESS USERS – Amstrad Professional User Club, Enterprise House PO BOX 10, Roper Street, Pallion Industrial Estate, Sunderland SR4 6SN. Tel 091-510 8787

APPLE MACINTOSH. John Lewis, Macintosh user group, Macintosh House, 11 South Parade, Summertown, Oxford OX2 7JL

APPLE SYSTEMS – Irene Flaxman, Apple 2000, PO Box 3, Liverpool L21 8PY.

ARABIC COMPUTING – Rich Lackey, Arabits, 9 Bellview Road, Worthing, West Sussex BN13 1EY

ATARI AND ST PC EMULATOR SUPPORT CLUB – SAE to 153 Parrock Street, Gravesend, Kent, DA12 1ER

ATARI ST/STE HELPLINE – We can scan, digitalise and provide loads of clip art. SAE to Nist 53, Lenaghan Park, Belfast, BT8 4JB

ATARI ST USERS ASSOCIATION – provides support for all Atari ST/E users. Also exclusive PD library for members. Write to ASTUA, 18 Poplar Close, Biggleswade, Beds, SG18 OEW

B

BBC MICRO - BEEBUG, 117 Hatfield Road, St Albans, Herts AL1 4JS. 0727 40303

BATPUG – Turbo Pascal user group also open to other PC Pascal programmers. Costs £10 per year. Write to 12 Clegg Avenue, Cleveley's, Blackpool, FYS 9BJ. Send a SAE for sample.

BRIDGE CENTRE AMIGA CLUB – A club not just for Amiga users but anyone who wants to become familiar with the Amiga. Games, music and educational software. PD software £1. Me,mbership £3 a year and an additional 20p every Friday. Come to our meetings at the Bridge Centre, Haddington, East Lothian, Scotland every Friday.

C

C USERS GROUP – Francis Glassborow, 64 Southfield Road, Oxfoed OX4 1PA. For everyone interested in the C and C++ programming languages. Publishes a bi-monthly newsletter.

CAMBRIDGE Z88 - Roy Woodward, Z88 Owners' Club, 68 Wellington St, Long Eaton, Nottingham

CD ROM - UK CD-ROM User Group, High Wings, Salem, Treforys, Abertawe 0792 844 370

CHESHIRE 16-BIT USERS CLUB – Amiga, ST, PC, Arc at Radley Common community centre, off Poplars Avenue, Orford, Warrington, Friday nights. All welcome. £1 admission.

CHESS COMPUTER PROGRAMMERS and interested players send an SAE to Steve Roe, 25 Nene Walk, Worksop, Notts or ring BBS 0909 479080

CHESHIRE NIMBUS USER GROUP – Geoff Nelder, Queens Park High School, Handbridge, Chester

CHURCH ADMINISTRATION - Rev Stoker Wilson, Church Computer User Group, St John's Vicarage, Greenside, Ryton, Tyne & Wear NE40 4AA. 091-413 8281

CID (Computers and Integration for the Disabled) is a registered charity. Write to Gordon, Chelsea Road, Inverurie, Aberdeenshire, ABS 9QZ or tel 0467 24202

CLERGY/MEDICAL EDUCATION – Mr T Jones, FREE-ED Shareware/PD 85 Stoke road, Taunton, Somerset TA1 3EL. Tel 0823 321 481

CLUB A3000 – The largest Archimedes User Group in London!. 081-445 2126.

COBOL LANGUAGE - Allen Reavie 22 Mourneview St, Portadown, Northern Ireland. BT62 3AW

COLECO ADAM - Keith Mamer, UKAS 33 Homer Road, Croydon CXR0 7SB

COMMODORE 64 CLUB – For more details send an SAE to The C64 Club, 20 Finlow Place, Dundee, Scotland

COMMODORE AMIGA – UK Amiga Users Group. Contact 144 Charles Street, Leicester LE2 00D. Tel 0533 510066 voice; 0533 517615

COMMUNITY COMPUTING - Community Computing Network 2nd Floor, 35 Pink Lane, Newcastle, NE1 5DW. Tel 091-261 0317

COMPUCORP. Compucorp University users group c/o Compucorp, Cunningham House, Westfield Lan, Kenton, Middx

COMPUNET – Write to Independent Compunet Club, 148 Furzehill road, Boreham Wood Herts. WD6 2DX

CPM & MSDOS Users Group – 42 Birkbeck Road, Wimbeldon, London SW19 9NZ. Tel 081-543 0824

CRYPTOGRAPHY & CODES - Mike Barlow, American Cryptogram Association 5052 Chestnut Avenue, Pierrefonds, Quebec HBZ 2A8 Canada

USER GROUP LISTING

D

DATAEASE USER GROUP – High-Tech House, 10 Blackfriars Street, Norwich, NR3 1SJF

DISABLED - Jeff Hughes, Special Needs User Group, 39 Eccleston Gardens, St Helens WA10 3BJ 0744 24608

DRAGON - Paul Grade, National Dragon Users Group, 6 Navarino Road, Worthing, Sussex or tel 0903 207585

E

ECONET - Michael Ryan, Econet User Gp, Balkeerie Cottage, Eassie by Forfar, Angus DD8 1SR

EDUCATION – Charles Shannon, TECUG, 35 Wellington St, Gravesend, Kent DA12 1JG. Tel 0474 567 931

EIGHT-BIT BACK-UP 8-bit user group for all. 25p plus SAE. to: 8-bit back-up, 1 Northolme Close, Grays, Essex.

EINSTEIN – Graham Bettany, UKEUG 80 Dales Road, Ipswich IP1 4JR

EINSTEIN PD USER GROUP – Help and advice for all Einstein users. Send SAE to SW Knowles, 23 Howldsworth Rise, Arnold, Nottingham, NG5 8HZ

ELITE PLAYER GROUP – Swap hints, tips, etc. Fanatics welcome. Beginners welcome. Write: Ian Hurst, 7 Perrybrook Walk, Ashton in Makerfield, Wigan, Lancs WN4 8TR.

ENTERPRISE – William Creaser, 6 Provident Street, Shaw, Oldham, DL2 8AQ. Independent Enterprise User group. Tel 0706 881382

ENTERPRISE - Tim Box, Independent Enterprise User Group, 50 Holdenhurst Avenue, Finchley, London N12 0HX. Tel 081-346 8032

EUG – The Acorn Electron User Group. "The ELK is not dead yet!" Send large SAE for details to EUG 134 Great Knightleys, Basildon, Essex 15 5HQ.

F

FIND YOUR LOCAL CLUB – British Association of Computer Clubs. Database of all user groups in the UK. John Dale 20 Orwell Drive, Aylesbury, Bucks HP21 3JN.

FORTH Language – Douglas Neale, FIG (FORTH Interest Group) UK, 58 Woodland Way, Morden, Surrey SM4 4DS

FRACTALCHAOS THEORY - Andy Lunness, 69 Bronte Avenue, Bury, Lancs. Tel 061-764 6469

G

GENEALOGISTS – Computer Group, Society of Genealogists, 14 Charterhouse Buildings, London EC1M 7BA. 071-251 8799

GENERAL HOME MICROS - Steve Winter, Chic Computer Club, PO BOX 121, Gerrards Cross, Bucks SL9 9JP 0753 884473

GEOS USER GROUP – for C64 and 128 owners. Disk based magazine. Send blank disk to GUG (UK) 110 Deansway, Woodloes Park, Warwick CV34 5DQ

GUG (UK) – GEOS User Group for C64/128. Also non-GEOS PD library. Send disk and return postage for GEOS, SAE for non-GEOS to GUG (UK), 110 Deansway, Woodloes Park, Warwick CV34 5DQ

GROUND FLOOR USER GROUP – support for all serious users of PC, ST, Amiga and PCW. Meets monthly in Calderdale, West Yorkshire. Further information from Jae on 0422 844991 days or 0422 845789 eves.

GUAGE - Martin Houston CUG (UK) Houston Technology Ltd, 14 Arden Oak Rd, Sheldon Birmingham BS26 3LX. Telephone 021-722 3168

I

IBM PC USER GROUP – PO BOX 360 Harrow HA1 4LQ.081-863 1191 BBS 081-863 6646

INERTIA ADVENTURES – A ray of light in the dark cavern of the text adventure. Do you dare to enter this saga? Tel 0265 51851 for details.

J

JOMAC USER GROUP – Spectrum and Amiga tips and pokes sent every month. Write with SAE to Jomac's, Filey Grove, Rhodes Street, Hull

JUPITER ACE – John Charter, Jupiter Ace Forth User Group, 17 Spring Wood Close, Dunston, Chesterfield S41 8BS. Tel 0246 237555

L

LISKEARD AMIGA USERS GROUP – For tips, help and information exchange. Contact Phil Golding, 19 Pound Street, Liskeard, Cornwall PL14 3JR. (0577) 46217.

LOCAL AUTHORITIES – Local Authority Micro User Group, John New, Borough Engineer's Dept, Municipal Offices, North Quay, Weymouth, Dorset DT4 8TA.. Tel 0305 785101 ext 272

LOTUS PRODUCTS - Lotus User Group, 79-80 Peascod St, Windsor, Berks SL4 1DH. Telephone 0753 841686

LYNX – R B Jones, Lynx User Group, 39 Ashton Close, Needingworth, St Ives, Cambs

LYNX DISK USER GROUP – J Koushappas. 172 Pasteur Gdns, London N18. Tel: 081 807 3859

LYNX LINK – Cards bought and sold and exchanged. Lynx fanzine each month. Send SAE to Peter Terry, 32 Boma Road, Trentham, Stoke, Staffordshire, ST4 8EB.

M

MEMOTECH FILE – 93b StJohns Road, Biddulph, Staffs ST8 6LL

MEMOTECH - Phil Eyres - Memotech Owners Club, 23 Denmead Road, Harefield, Southampton SO2 5GS. Tel 0703 585106

MICRO-DESIGN USER GROUP – For PCW owners requiring assitance and advice with this DTP package. Phone Phil on 0709 543390

MID CORNWALL COMPUTER CO-OP – Atari ST. 8 Victoria Road, Roche, St Austel, Cornwall PL 26 8JF. Telephone 0726 890473

MIDI/MUSIC – Spectrum music machine/MIDI user group. Magazine on tape, plus programs and lots more. For more details contact Sean Sanderson on 05242 62258

MSX SYSTEMS – write to Keith Neal, MSX Link, Austerby House, 80 Austerby, Bourne, Linconshire PE10 9JL

MUG USER GROUP – If you either play or run a multi-user game then write with details to the MUG User Group, 4 Garden Close, Penrith, Cumbria, CA11 7UD.

N

NASCOM/80-BUS/CPM - Scorpio Systems, PO BOX 286, Aylesbury, Bucks HP22 6PU.Tel 0296 624868

NEWBRAIN - Ron Bury, NewBrain Support Grp, 70 Cranberry Lane, Darwen, Lancs BB3 2HL. Tel 0254 771891

NIMBUG – write to 13 Belle Vue Ave, Gosforth, Newcastle-upon-Tyne NE3 1AH. Tel 091-285 7806

NORTHERN IRELAND AMIGA USERS – Send £2 for disk-based newsletter. Tips, news, reviews etc. NIAU, 98 Crebilly Road, Ballymena, County Antrim BT42 4DS.

NW ARCHIMEDES USER GROUP – Meets every Friday at Citizens Advice Bureau, next to Spectrum arena in Birchwood, Warrington. Ring Paul on 051-426 3915 after 6pm

O

OBSOLETE COMPUTER CLUB – Established 1990 to preserve and support Pre 1986 micros. Applicaions in writing to Mr S Walters, 42 Achilles Road, London NW6 1EA stating system details, date and history. All systems, micros and minis.

OLIVETTI PC1/PCS USER GROUP – Help with all aspects of these machines. Tel 0977 617077 or write to 68 Queen Elizabeth Drive, Normanton, W Yorks

ORIC ENTHUSIASTS – The contact point for all Oric support. 8 Staley Hall Road, Stalybridge, Cheshire SK15 3DT. Tel: 061-303 7369.

OS/2 - Karen Burns, OS/2 User Group,Cecily Hill Castle, Cirencester, Glos LG7 2EF. Tel 0285 655888

OSBORNE/CPM/MSDOS – write to Jeremy Browne BOOG, 102a Aldershot Road, Fleet, Hants GU13 9NY. Tel 0252 621745 voice or 626233 BB

P

PAGESTREAM USERS GROUP – all Atari/Amiga owners of *Pagestream* send large SAE to PUG, 70 Offerton Lane, Stockport, SK2 5BS.

PAS PD for the ST. Send 75p for the latest details and disk catalogue (refundable). Write to PAS, 97 Holland Street, Ebbw Vale, Gwent NP3 6HY.

PC INDEPENDENT USER CLUB – Helpline service, bi-monthly journal, shareware/PD, local meetings, bulletin board, £29-£50 pa (£36 businesses, £19 students) Free 30 day trial 0732 771512.

POSTSCRIPT USERS GROUP – JP McKeown, 3 Pedn Moran, St Mawes, Cornwall TR2 5BA.

PRESTEL - Andy Leeder, ClubSpot 810, Church Farm, Stratton St Michael, Norwich, Norfolk, NRQ15 2QB

PSION ORGANISER - Mike O'Regan, IPSO, 130 Stapleford Ln, Beeston, Nottingham NG9 6GB. Tel 0602 735482

PUC'S ATARI PORTFOLIO USER GROUP – Offers: newsletters, technical assistance, Talkback feature, software/hardware updates and hot news. Tel 0635 73662.

Q

QUANTA, QL AND THOR USER GROUP – The Corner House, Loxley, Warwick, CV35 9JT. Tel: 0789 842543

R

RE-RUN USER GROUP– 8-bit user group. User support, newsletters and PD library. Send stamp and 10p for information to User Group, One Northolme Close, Grays, Essex, RM16 2NX.

RESEARCH MACHINES - Steve Rochford RM National User Group, George Stephenson High School, Southgate, Killingworth, Newcastle NE12 0SA. Tel 091-268 2002

REVELATION (PICK) — write to Malcolm Frame, UK Revelation User Group, 136 Saint Albans Road, Watford WD2 4AE or Telephone 0923 35515

R:BASE – write to Mrs Tansy Beal, R:Base User Group c/o Room A2044 BBC Woodlands, 80 Woods Lane, London W12 0TT. Telephone 081-576 7187

S

SCIENTIFIC PC USERS – write to Tim Bunning, SPCUG PO BOX 17, Retford, Notts DN22 6BQ Tel 0777 709009

SEGA SWAP CLUB – Exchange your old megadrive games with other members. For details send SAE to SSC, 10 Sandwith Road, Todwill, Sheffield, S31 0JP

SERIOUS GAMER – Flat C, 43 Colvestone Crescent, London E8 2LG. Telephone 071 241 5446.

SERVICES USERS - write to Squadron Leader G Howson, Services Personal Computer Association, Stlk Eng 15a HQSTC RAF High Wycombe, Buckinghamshire

SHARP USERS CLUB – Contact Andrew Ferguson, 11 Harcourt Close, Henley-on-Thames, Oxon RG9 1UZ. Tel 0491 574850 evenings only

SHREWSBURY AMIGA USER GROUP – 1 Haughmond Court, Featherbed Lane, Harlescott, Shrewsbury, SY1 4NJ. Please enclose an SAE

SIRIUS – Simon Sheppard, ISSUE PO BOX 222, Brighton BN1 3BR

SHREWSBURY AMIGA USER GROUP –Write with SAE to A Preece, 1 Haughmond Court, Featherbed Lane, Harlescott, Shrewsbury, SY1 4NJ.

SOLINET BBC – User Group supporting SWR and Solidisk products. Magazine on disk. SAE 41 Westbrook Drive, Rainworth, Mansfield, Notts NG21 0FB

SMART SYSTEMS USERS – write to Francis Barton, Basement Holy Rosary church, Louis Street, Chapeltown, Leeds LS7 4BP. Tel 0532 629202

THE SOUTH EAST ESSEX USER GROUP (SEEUG) – Two computer graduates wish to form ST group for local enthusiasts. Interested? Call 04022 24702 or 081 598 8998.

SOUTH 16 AMIGA USER GROUP – the UK's number one Amiga user group. For more information send SAE to South 16, PO box 16, Southampton, S09 7AU. Now!

SOUTHERN AND DISTRICT. PC and ST user group.Tony Lowes 61A Broadway West, Leigh on Sea, Essex S59 2BX

SPECTRUM PLUS 3 USER GROUP – monthly magazine. 57 Lovers Walk, Dunstable, Bedfordshire, LU5 4BG

ST USER GROUP – Send an SAE for a news letter to ST User Group, Ben Dobson, 1 Ryedale Way, Selby, North Yorkshire YUO8 9PB.

STOURBRIDGE ATARI USERS' GROUP – for 8-bit Atari computers.Send SAE to LK Taylor, 99 Bredon Road, Stourbridge, West Midlands, DY8 4LA. Telephone 0384 379575

SUPER FAMICOM PENPALS CLUB (SFPC) – Growing club for ST owners. All new games reviewed. Write to : P Jess, 58 Legacurry Road, Ravarnette, Lisburn N Ireland.

SYNCROSOFT – Exclusive 64 computer information. £2.95 to join, including p&p. Make cheques to Syncrosoft and send them to 9-10 Morland Gdns, Southall, Middx UB1 3DY

PD ON THE MOVE

Exciting changes are coming to *Express* and among them is a full colour, three page Public Domain section. To accomapny this, a revamped version of the PD library listing we have been running on these pages every month will now go weekly!

So, PD libraries, if you want to be included in the most comprehensive and widely read PD listing in a UK magazine fill in the form on the next page now! And that includes libraries included in our last printed listing – we want to make this the most up to date and accurate listing humanly, or even inhumanly, possible!

T

TAS (DATABASE) - Neil Hegarty, TASUG C/O Solutions for You, 1st Floor, 2 Lytton Rd, New Barnet, Hertsm EN5 5BY. Tel 081-441 1133, BBS 081-449 4171

TANDY/MS-DOS - Roger Storrs, NATGUG Oakfield Ldge, Ram Hill, Coalpit Heath, Bristol BS12 2TY. Telephone 0454 772 920

TEXAS T1 – Peter Brooks, International TI User Group 96 Banbury road, Oxford OX2 6JT. Telephone 0865 510822.

TRANSPUTER - Howard Oakley, Transputer User Group, Brooklands Lodge, Park View Close, Wroxall, Ventnor, Isle of Wight

TURBO – SAM Coupé user group. Six newsletters and six magazines each year plus a big PD library. £10 for a year. SAE for Information to TURBO, 8 Healet, Lakeside, Tamworth, Staffs, B77 2RF.

U

UNIX USERS – UKUUG Secretariat Owles Hall, Buntingford, Herts, SG9 9PL. Tel 0763 73039 /73255 (fax)

V

VENTURA PUBLISHING – VPU (Ventura Publisher User group) Linda Liddell VPU c/o LLA Lound House, Forncett St Mary, Norfolk, NR16 1JP. Tel 0508 41580

W

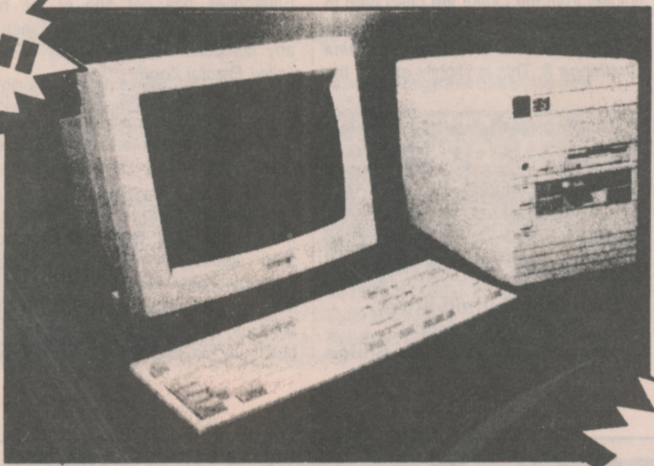
WATFORD INDEPENDENT – Commodore Product User Group. Meetings 3rd Wednesday in month 7.30-10.00am at St Thomas Church Hall, Watford. Large PD library available to members. Details from Y2 Computing, Watford, 0923 50161

WORDPERFECT – Michael Norman, Wordperfect User Group (UK) Dove Barn, Manor Farm, Wootton Woodstock, Oxon, OX7 1DX. Tel 0992 850500.

WORDPERFECT – Dr Ian Barton, A Perfect World, High Rigg, Alma Rd, Tideswell, Derbys SK17 8LS. Tel 0298 871 925

"WHAT!!! PC TOWER SYSTEMS from only £399 + VAT"

"YES!!"



All our systems are fully IBM compatible and completely upgradeable throughout the whole pc range. phone

NOW

Vanitec Data Services Ltd can offer a complete range of IBM compatible computers from £399 + VAT and can include 1 years on site maintenance and hardware installation by our own engineering team

Vanitec
DATA SERVICES LTD

IBM Authorised Dealer
IBM Personal Printers

IBM Authorised Dealer
IBM Typewriters

YES!!! Vanitec Data Services Ltd

● TEL: 0249 448 777 ●

● FAX: 0249 448 765 ●

THE PD COLUMN

James Leach takes an ST to bits with a DIY package, gets down to B-ASICs and celebrates the PD pitbull's birthday with a free gift. He's also taken to lateral thinking and gone a bit weird...

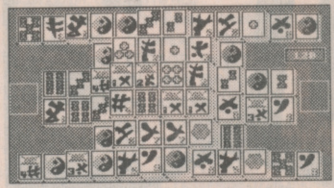
If you're one of those tinkerers who's always tempting fate by mucking around with their perfectly serviceable ST, The South West PD Software Library has just the thing for you. It's a new ***Do It Yourself*** disk which contains text and diagrams telling you how to carry out hardware modifications to your machine like adding a four-way joystick, external boot drive and other useful things. It's the sort of information which appears in magazines from time to time but which you always lose or spill coffee over, so to see it clearly presented on disk is remarkably useful.

HAPPY BIRTHDAY

A little bit of news now: successful ST PD suppliers Paradise Computers PDL is celebrating its second birthday by launching version 2.1 of its catalogue. It comes complete with a full copy of ***Neochrome Master*** free of charge. The catalogue disk has details of over 800 disks and until 1 October everything (except Budgie stuff) is only £1 per disk. What's more, for every full disk of PD you send Paradise, it will send you three disks in return. No wonder Paradise refers to itself as 'the Pitbull of the PD world' (not something to brag about, I'd have said).

SHANGHAI SURPRISE

Games from the Orient are often hard to learn initially but immense fun once you do. Once such for the Amiga is ***China Challenge II***. This is slightly akin to the old game ***Shanghai***. It's great fun and there isn't room to explain it here, so contact Capricorn Computers for more info.



• Inscrutable but addictive, China Challenge II from Capricorn Computers for Amiga

Interest in fractal geometry and the Chaos Theory seems to have died down a bit recently. It's probably because the subject is no longer new and 'exciting'. This is bit of a pity as Goodman Enterprises has got one of the best fractal generation programs I've seen on any computer. It's for the ST and it's called ***Fractal Zoom***.

Like many others, it takes it's time about drawing the chaotic images, but for sheer number of features and ease of use I don't think it can be beaten. You can draw the famous Mandelbrot or Julia Sets from a pull-down menu (as well as many fascinating renditions). You can then adjust the colour palette and instantaneously view the changes you've made to the image. You can SAVE it to disk and (here's the best bit) you can build a movie, in which the camera dives into your fractal piccy, never, of course getting any further towards the end of it. You can steer the camera in any direction by making small movements on the joystick (so as to avoid large and boring patches of the same colour). The movie-maker option again takes time to set itself up, but once you've made it you can SAVE it out and watch it in real time. This function alone makes ***Fractal Zoom*** worth getting hold of, but you'll soon be exploring much more of the infinitely regressing world of fractals if you do.

MIND EXPANDING

If you gain pleasure and stimulation from the pursuit of lateral thinking, there's a game out for the Amiga called ***Weird In Edgeways*** which might be right up your street. It takes place on several computer printed circuit boards and you play a hardware controller trying to debug the system. You're in charge of a little droid who must chase the bugs around the board as well as mend the

69p SPECIAL OFFER PD 69p

YES IT IS TRUE PD FOR JUST 69p - OFFER ENDS 31/12/91
HERE IS A SMALL SELECTION FROM OUR VAST RANGE
OVERSEAS ORDERS ADD 25p A DISK FOR EUROPE 60p R.O.W.

*= 1MB
(2)= No of disks

ENQUIRIES TEL:
0424 712349

DEMOS
D113) Silents Scroller
D115) Utopia Cartoon Slides
D117) Bunsen Burner
D119) The Link Megademo
D122) Ghost Pool
D124) Scoopex Seven Sins
D126) Disney Slideshow
D128) Sleeping Bag Demo
D130) System 5 Demo
D132) Alpha Flight Megademo 2
D134) Share And Enjoy 46
D136) Thames TV Demo
D138) Vision Megademo
D140) Fast Cars Slideshow
D142) Mobed
D145) Kefrens Wall Demo
D147) Beast 2 Preview
D149) Treacl
D151) Share and Enjoy 47
D153) Simpsons Mini Mega (XXX)
D155) Glass World Animation
D157) Congaman Animation
D160) Anarchy Scratch Pack 39
D162) Bugs Bunny Anim*
D164) Smurf +Cokeman Anims*
D166) Juggette Animation

UTILITIES
P02) A68K Assembler
P04) North C
U001) Jazzbench
U004) Visicalc Spreadsheet
U006) Intro Maker
U008) Sidney And Friends
U011) XLS Disk 1
U013) Clip Art
U015) The Magicians Utilities
U017) Steel Moon Utilities
U019) CADV
U021) Super C Disk
U024) Red Devil Utils 4
U026) Amibase V3.76
U031) Bootbench
U033) C-Light 1+2
U035) System Checker
U037) Tetra Copier
U053) Text Plus Wordprocessor
U056) Wordwright Wordprocessor
U058) Running Man Update
U060) Mag Media Disk Utilities
U062) New Age Utilities
U063) Pendle Europa Utils
U065) Fonts
U067) ICPUG Printer Utilities
U069) XLS Best Of PD 3

GAMES
G004) Breakout Construction Set
G006) Star Trek (2)
G008) Drip *
G010) Quiz Master 2
G012) Popeye
G014) Tennis *
G016) Flaschbier
G018) Treasure Hunt
G020) Wet Beaver Games
G022) Workbench Games And Hacks
G024) PD Games Compilation
G026) Movie Games
G028) Eatmine
G030) Return To Earth
G032) Klondike
G034) Trek Trivia
G036) Pipeline
G019) Battleforce
G021) Arcade Games
G023) Star Trek The Next Gen.
G025) UGA Games
G027) Hack
G029) PDOM Games
G031) BIP
G033) Stoneage
G035) Jeopardy
G041) Frantic Freddy

DISK CATALOGUE 50p
CONTAINS DETAILS OF ALL OUR DISKS AND IS UPDATED FREELY WITH EVERY ORDER. INCLUDES 2 FREE GAMES + A DEMO

We also stock APDL, Amicus, T-Bag and Fred Fish Disks.

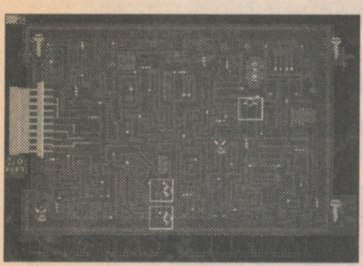
All orders dispatched within 24 hours.

Buy now while the price is so low

Please add 50p postage + packing to all orders.

PLEASE MAKE ALL CHEQUES AND POSTAL ORDERS TO S.P.D.

S.P.D. 62 MANOR ROAD, HASTINGS, E.SUSSEX, TN34 3LJ



• Instead of spending hours debugging, why not pretend to do it with *Weird In Edgeways*?

damage they've wreaked. You don't control the droid directly though (here's the lateral thinking bit), you simply drop commands down the board to your droid. Hence you must plan for where he'll be when these commands reach him. It's slightly reminiscent of ***Tetris*** (your commands take the form of little boxes that drop down on top of each other), but ***Tetris*** is instinctive while this game requires a great deal of concentration. It looks good, it has a nice soundtrack and you'll be hooked just as soon as you've worked out how to play. ***Weird In Edgeways*** is from that most prolific of PD suppliers, Amiganuts.

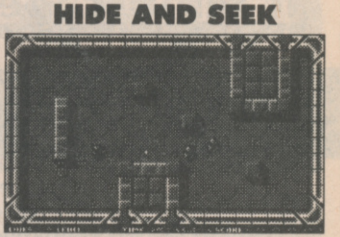
SAM AND FRED

Sam Coupé owners will be pleased that PD seems to be gaining more of a foothold for their machine every day. ***FRED*** is a magazine-on-a-disk as well as a PD collection produced monthly by Colin MacDonald. Everything on it is original, and it contains demos (such as ***Trip-A-Tron*** by Jeff Minter), plenty of full games and a comprehensive look at the SAM world (in the magazine section). It's up to issue 11 now, and is getting more and more impressive. SAM owners would do well to support it.

BACK TO B-ASIC

Staying with the 8-bits for a while, Robot PD has got hold of a program from Logon System (reputedly the world's best CPC demo group) which runs on the enhanced Amstrad Plus range. Called ***B-ASIC***, it gives you 25 extra commands which you can use in your own programs. The upshot is that you can get 4096 colours on-screen at one time, smooth hardware sprites and rapid movement in your progs (who needs an Amiga?). All you have to do is send 45p and a blank 3-inch disk to Robot, who will then let you have ***B-ASIC***, as well as a software database, 42 fonts, Speedlock tape-to-disc utilities, SoftArc's archiver, a 40 to 80 track disc converter and much more. Oh, and on the other side of your disc you can have a load more PD (of your choice). It's got to be a phenomenal deal which ever way you look at it).

HIDE AND SEEK



• A deadly game of hide and seek is under way. But meanwhile you're at home playing *Robotz* on your ST

And the other game of note this week is ***Robotz*** from Jennix PD. It runs on the Atari ST and is another mightily addictive piece of PD. You play a little character seen from top view who has to make his way through a series of mazes. Hampering his progress are a number of robots who keep shooting at you. They're immune to your return fire until you destroy the power generators on each level. So on each screen you must play a game of hide and seek with the droids until you get to the generators and blow them up. Then you can hunt the robots to your hearts content (except that there's a time limit ticking away). It plays infinitely better than it sounds. It's smooth, difficult and very, very hard to leave alone. ■

WHO TO GET HOLD OF WHEN YOU NEED THEM

For *DIY* info contact: The South West PD Software Library, PO Box 562, Wimborne, Dorset BH21 2YD

For a free copy of *Neochrome Master* for the ST, drop a line to Paradise Computers (Global) PDL, ST Department, 9 Westfield Crescent, East Sussex, Brighton BN1 8JB

***B-ASIC* is available from the Robot PD Library, 2 Trent Road, Oakham, Rutland LE15 6HF**

***Fractal Zoom* can be yours if you contact Goodmans Enterprises, 16 Conrad Close, Meir Hay Estate, Longton, Stoke on Trent ST3 1SW**

To get hold of the maddeningly addictive *Robotz* for your ST, you'll need to contact Jennix PD of 66 Abbey Road, Strood, Kent ME2 3QB

***Weird In Edgeways*, that strange Amiga game requiring lateral thinking can be found at Amiganuts United,169 Dale Valley Road, Hollybrook, Southampton SO1 6QX**

***China Challenge II* is from Capricorn Computers of 35 Warwick Rd, Olton, Solihull, West Midlands B92 7HS**

***FRED*, the PD-packed magazine on a disk for the SAM Coupé can be procured from Colin MacDonald, 40 Roundyhill, Monifieth, Dundee DD5 4RZ**

AMIGANUTS UNITED
169 DALE VALLEY ROAD, HOLLYBROOK, SOUTHAMPTON, SO1 6QX.
Tel enquiries: 0703 785680 10.30 to 5.30. Mail Order only.

1036: AMIBASE PROFESSIONAL II. (V1.2) This is an excellent database program £3.50
BUG-BASH: Kill the bugs, clean up the trash in the garden. A good fun game............................£3.00
877: 1 ACROSS 2 DOWN. A fully fledged crossword program, for only £5.00 (Data disk no. 1 included). Data disks 2, 3, 4, & 5 now ready at £2.00 each.
1038: SUPER AMIDASH. Do you remember that good old Commodore 64 game Boulderdash? Well here is your chance to have that fun again. 1Mb £3.00
1068: MOD PROCESSOR V1.92. Make picture and/or music progs, adjust pic height/width. This version will load the new 8 Channel Octamed music and is excellent! £3.50
1075: INTUIMENU. The easiest way yet to execute all your programs. (A must)..............................£3.00
1083: COPPER WRITTER/SCREEN DESIGNER. By Frank Tout. (For programmers only.)......................£3.00
1088: WEIRD IN EDGWAYS. This is a good puzzle game by Chris Banks. 1Mb...................................£3.00
1100: SCHOOL TIMETABLE CREATOR. (Print your timetable). By Keith Grant. 1Mb £3.00
1102: THE SPRITE DESIGNER. A good way to draw/ save sprites. By Frank Tout..........................£3.00
1139: THE ADVANCED SCREEN DESIGNER. Similar to 1083 but far superior £3.50

Into coding? - Want to learn? The Amiga Coders Club is for you! ACC 1-4 is the first four compressed issues of an excellent series for coders, even if you are new to the Amiga. If you want to learn Assembly, using DevPac, (or our own new ACC special assembler disk), this is the club for you! ACC 1-4 (compressed) £1.50. The Amiga Coders Club disks are packed with source, hints, tips, advice from many of the well known coders that are on the Amiga scene today. Issue numbers 5-15 are now available. Please note, (excluding the compressed introductory disk (ACC 1-4), and no. 12) the price for each issue of the ACC disks is only £3.00. ACC 12 is our birthday issue, it is a 2 disk set, and therefore the price is £6.00. Amiga Coders Club Special! Here is a low priced assembler package for all you coders out there in Amigaland. (See the review in last months Amiga Format) £5.00

MASTER VIRUS KILLER V2.2 IS HERE!
It now recognises another 27 of the little buggers, including the virulent Sha!
This excellent program is only **£5.00**

The full two disk version of Mike Simpson's **A-GENE** is here! No need to send your order to Australia anymore! **£15.00** Europe or **£20.00** rest of the world. Add £1.50 to the above price if you require the manual to A-Gene

NO MORE WAITING! SUBSCRIBE TO THE AMIGA CODERS CLUB NOW!
If you would like to obtain the Amiga Coders Club disks as soon as they are published, why not send £33.00 and ask to go on the ACC mailing list now? We will send you each issue as soon as it's ready, (applies to issue 14 onwards).
If ordering from outside EC Countries, add and extra £6.00 for years postage

PLEASE NOTE THAT ISSUES RELEASED PRIOR TO ACC 14 MUST BE PURCHASED SEPARATELY

If you would like to take out a years subscription for the T.BAG disks, (applies to issue 50 onward), simply send £33.00 and we will send you each issue well in advance of them becoming available from any other supplier. (Note that issues 50 to 55 are ready now and will be sent upon joining). Issues released prior to T.BAG 50 must be purchased separately @ £2.00 each. If ordering from a non EC country, add extra £6.00 to cover the years postage.

THE FANTASTIC (1Mb) EIGHT OR FOUR CHANNEL MIDI COMPATIBLE OctaMED v1

ONLY £10.00 (£15.00 for non-European). The price includes return post and packing. Payment in pounds sterling only, if ordering from overseas, send a bankers order/ eurocheque etc. (Credit card orders will not be accepted).
Note that V3.11 of the Public Domain four channel Med is also included in this excellent program and you can switch from 8 to 4 channels at will.

Main catalogue disk sent "FREE" with orders above £15.00 -
Please remember to ask for your free copy if you send in an order above £15.00 as we tend to forget.
Prices quoted include return post/packing/VAT -
Make cheques payable to:
AMIGANUTS UNITED
(help us by stating which magazine you saw this advert in).
Also available is the brand new 1991 update number four. Send for it now! £1.00.
(Update four contains the new DCopy V1.6 and it is a bargain!)

IMPORTANT NOTICE! Excluding the T.BAG disks, the programs detailed above are not Public Domain and purchasers may only make backups for their own use.

COMPUTER JOBS

Exciting career opportunities at Mindscape

Amiga/ST 3D Programmer

We currently have an exciting opportunity for a competent Amiga/ST programmer. We would fly you, all expenses paid, to Vancouver Canada and provide free accommodation as well as an opportunity to work with some of the best 3D programmers in the world. The successful candidate must have a sense of adventure, be over 18 years old and have excellent 3D Amiga/ST assembly language programming skills. The initial contract would be for 3 months but longer term opportunities may also be available.

Salary negotiable.

Super Famicom Programmer

We are also looking for an in-house programmer to work on the Super Famicom games system. Ideally you would have had assembly language programming skills on the Super Famicom or other consoles. But we are also prepared to consider relevant assembly language programming skills on the 6502/68000 preferably in a PC based cross development environment.

Previous applicants may reapply.

Salary is negotiable.

Super Famicom, Amiga ST, PC Musician

We are currently looking for a freelance musician to work on our forthcoming releases. You would be expected to provide music and sound effects for the Super Famicom, Amiga, ST and PC using state of the art software and equipment.

Contract rates are negotiable.

MINDSCAPE
INTERNATIONAL

If you are interested please contact:
Richard Leinfellner
Software Development Group
Mindscape International
Charles Avenue
Maltings Park
Burgess Hill
West Sussex
RH15 9PQ

DO YOU WANT TO BECOME A PROGRAMMER?

Established 1968

Move across to the rewarding world of IT

We have a series of short and long term training programmers in Computing and Information Processing.

- C & G 424/425 Certificate in applications programming.
- C & G 418 Computer Programming & Information Processing.
- Evening courses in DBASE, WP, Spreadsheet Analysis.
- Evening courses in Pascal, BASIC & COBOL.

Contact Central London College on 071-580 4596.

TRAINING FOR YOUR FUTURE

Future
PUBLISHING

- Launched in 1985
- Now over 200 staff
- Market leader in computer titles
- Exciting launch plans
- Britain's fastest-growing publisher
- 15 national newsstand magazines

Staff Writer - 8000 Plus

£8,000-£10,000 (depending on experience)

8000 PLUS, Britain's largest selling magazine for the Amstrad PCW, is looking for a staff writer to join a busy, hard working team. 8000 Plus is on the brink of massive expansion, and we are looking for someone who can contribute significantly to that growth. The successful candidate will, ideally;

- own a PCW
- have a working knowledge of CP/M and at least two other popular PCW programs
- be able to demonstrate the ability to write clear, lively copy within strict deadlines
- be highly self-motivated, and able to work without supervision
- have a sense of humour

If you think that you've got what it takes, write a 500-word appraisal of the September issue of 8000 Plus, and send it, together with a CV and covering letter to:
Annie Chalmers,
Human Resources Department
at the address below.

Future Publishing Ltd, Beauford Court, 30 Monmouth Street, Bath, BA1 2BW Tel: (0225) 442244

THE EVENT HORIZON

There's something for everyone here – hyperactive technophiles can attend the latest happenings in the computer world and couch potatoes can just lie back and read the industry gossip

THE PLACES TO BE . . .

Making the Difference Now – Tue 31 Dec
At the Science Museum, London. Info: 071-938 8080.

All Formats Computer Fair Sun 1 Sept
University of Leeds Sports Centre. Info: 0225 868100.

All Formats Computer Fair Sat 7 Sept
Royal Horticultural Hall, London. Info: 0225 868100.

PLASA Light & Sound Show Sun 8 – Wed 11 Sept
At Olympia, London. Info: 071-370 8174.

EEMA Thu 12 – Fri 13 Sept
European Electronic Mail Association Autumn at the Hotel Thermal, Budapest, Hungary. Info: +44386 793 028.

Leeds Computer Extravaganza Fri 13 – Sun 15 Sept
At the New Exhibition Centre, Leeds University. Info: 0532 677 657.

All Formats Computer Fair Sat 14 Sept
National Motorcycle Museum, Solihull. Info: 0225 868100

CP/M & MSDOS User's Group Sat 14 Sept
At the Spring Lodge Community Centre in Witham. Info: 0376 517496.

Business Computing '91 Tue 17 – Fri 20 Sept
At the Earls Court Exhibition Centre, London. Info: 071-486 1951.

International Police Exhibition and Conference '91 Tue 17 – Thu 19 Sept
At London's Barbican Exhibition Centre. Info: 081-995 7700.

The Works of Charles Babbage Thu 19 Sept
Lecture at the King Edward VI College, Totnes, Devon at 14.15. Info: 0803 863821.

All Formats Computer Fair Sun 22 Sept
At City Hall, Glasgow. Info: 0225 868100.

All Formats Computer Fair Sun 6 Oct
At The Brunel Centre, Bristol. Info: 0225 868100.

Effective Management of Information Technology Security Conference Mon 7 – Tue 8 Oct
At the Forte Crest Regents Park Hotel, London. Info: 071-587 1117.

Computers Count Tue 8 – Thu 10 Oct
At Totnes Civic Hall. Info: 0803 863821.

Business Communications Awards Thu 10 October
At the Savoy Hotel. Info: 0800 800 847.

Charles Babbage's Impact on Modern Computing Wed 23 Oct
At the Science Museum, London at 17.30. Info: 071-938 8196.

Image Processing '91 Tue 29 – Thu 31 Oct
At Birmingham NEC. Info: 081-868 4466.

System Builder Wed 30 – Thu 31 Oct
At Sandown Exhibition Centre, Esher, Surrey. Info: 0822 614671.

Computer Graphics '91 Tue 5 – Thu 7 Nov
At the Alexandra Place, London. Info: 081-868 9933.

Desktop Cad '91 Tue 5 – Thu 7 Nov
As above.

Open Systems 91 Wed 6 – Fri 8 Nov
Olympia, London. Info: 0784 472200. ■

The Insider...

Beaten to a pulp this week by irate publishers and journalists, The Insider writes from a secret location

Remember my children, never offend a computer journalist, especially not a high ranking one. So, from my secret hospital bed situation, I will do exactly that.

THE INDUSTRY QUIZ

Right, here we go with the world's first relatively comprehensive Computer Industry Quiz. No prizes, it's just for fun...

1) Which software house's PR lady telephoned a certain computer journo and offered '... a good time' for a favourable games review?

2) Which software house boss at a Computer Arena bet a magazine publisher that he could bed a PR lady that night. And won?

3) Which software publisher has threatened to sue more magazines than any other?

4) Which review of a film licence sequel nearly ended in court because the software house in question objected to a review of it? A clue: Who ya gonna call?

4) Which ex-*Express* hack was dragged over the coals by a female head of a software house for a bad, but generally accepted as fair, games review.

5) What was the game? Clue: rearrange the following words – Worlds Forgotten.

6) Which software house?

7) *Teenage Mutant Hero Turtles* from Mirrorsoft was: a) Good b) Fair c) For some strange reason not sent out in time to be reviewed before it hit the streets d) Absolutely dire?

8) The same game never made it into the Amiga Screen Gems pack because a) Commodore didn't want it b) Nintendo didn't want it to be there c) Someone forgot to put it in d) See D above?

9) Which train was emptied at Bristol Temple Meads station because it was a fire hazard? Which company owned it?

10) Who said 'The Game Boy sucks!' and where?

11) In which part of London is Tottenham?

12) In which part of London was Alan Michael Sugar born?

13) So why does everyone seem to think that Spurs was his local club?

14) At which major magazine publishing house did a certain Dick Shiner work?

15) Which major magazine publishing house was responsible for *Him* ?

Answers on a postcard to The Insider Quiz, *NCE*, 30 Monmouth St, Bath. BA1 2BW. I might even award a tiny prizette.

Golden Moments

A look back into the history of computing with *Express*. If it happened we reported it first.

ONE YEAR AGO

- A British-made encryption device fell into the hands of the Iraqis. The device was one of several used to code and decode military signals in the event of war. Iraqi use of the device meant that it was impossible for NATO intelligence to anticipate Iraqi movements, since all orders were coded. It didn't help them, though.
- A hacker, serving a four month jail sentence for illegal entry into university computer systems, was approached by prisoners who offered him money to remove their criminal records from police computers. Being a good citizen, he, of course, declined.
- Somebody finally found a constructive use for the BBC micro – as a mouse home. The mouse was found nestled between the circuit boards of Pippa Giles' discarded BBC, which she had retrieved to play a few games. Sadly, the mouse was evicted.

TWO YEARS AGO

- Piracy spread from the relatively easy domain of computer software to the more involved heights (if such a word can be used in this context) of cartridge piracy. Illegal cartridges were being sold in the UK for both the PC Engine and PC Engine console systems. A UK dealer selling the cartridges claimed that he was not aware that it was illegal if the originals had not been officially registered or launched in this country. Ignorance of the law is no excuse, citizen.
- All-in-one computer systems were all the rage in Japan. A Canon machine came with a PC, touch-screen monitor, telephone, fax machine and printer all in the same box. Surprisingly, the idea has not caught on in the West.
- The DTI crticised Eric Howe, administrator of Britain's computer privacy laws. The DTI saw the laws as being too weak, and suggested that all hacking should be criminalised. Howe countered with the salient point that the misbehaviour of youngsters, insignificant in itself, should hardly be criminalised.

Studio Software

The BEST choice for all your computer needs.

20 Oldfield Circus, Off Whitton Avenue
West, Northolt, Middlesex.
Telephone 081 423 8773
Opening times: Mon-Sat 9.00am - 5.00pm

MEGADRIVE GAMES

John Maddens Football	£34.00	Strider	£29.00
Bonanza Bros	£28.50	Hellfire	£25.00
Sonic The Hedgehog	£30.00	Eswat	£25.00
Ghouls/Ghosts	£30.00	Dick Tracey	£27.00
Golden Axe	£28.00	PGA Tour Golf	£32.00
Thunderforce 3	£30.00	Wonderboy 3	£25.00
Super Monaco GP	£31.00	Midnight Resistance	£31.00
Fire Mustang	£30.00		

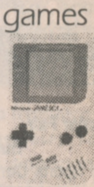
Super Famicom £125.00

SEGA MEGADRIVE

PAL Megadrive	£75.00
SCART Megadrive	£75.00
UK/Jap Convertor	£14.00

SEGA GAMEGEAR

Gamegear + 2 games	£140.00
2 player lead	£20.00



Gameboys £62.00

GAMEGEAR GAMES

Golf	£22.00	Mappy	£22.00
Super Shinobi	£22.00	Gorby	£22.00
Head Buster	£22.00	Mickey Mouse	£22.00

SPECIAL SEGA SIZZLERS

SEGA MEGADRIVE AND SONIC

ONLY £75.00

(MEGA!!)

★ EXCLUSIVE ★

We are now taking orders for the SEGA CD-ROM machine at a cool price of £300 (Please note that ordering will take up to 3 weeks)
SEND NO MONEY NOW - CALL FOR DETAILS

ALSO

Buy either a Megadrive or Famicom and you will be entered into our mad prize give-away.
Prize money of £500 smackers given away each month.
£1000 every six mofnths (combination of the past 6 months)
AND FINALLY FOR A CHRISTMAS CRACKER PAYOUT.....£5000
If you like being given money then buy one of these
MEAN MACHINES.

HOW TO ENTER COMPETITION

All you have to do is buy your machine from Studio Software, your details will be entered automatically.
All winners will be notified after the competiiton.

Remember if you're not in you can't win.

Access and Visa welcome. All cheques made payable to:

STUDIO SOFTWARE COMPUTING

All goods despatched within 72 hours, first class recorded delivery.

SEX, LIES AND DPIII

• *The Complete Presentational Tool* is geared more towards producing graphics for home videos and business presentations

So you want to be a digital artist? Dave Golder does, so he set out to discover whether two video tutorials for *DeluxePaint III* can help him develop from drawing stickmen to designing works of art...

PRODUCT: *DeluxePaint III* Tutor
MACHINE: VHS video recorders
FROM: Audition Computer Services
CONTACT: 0780 55888/720531

PRODUCT: *DeluxePaint III*: The Complete Presentation Tool
MACHINE: VHS Video recorders
FROM: Video One
CONTACT: 041-552 7865

Here is some software with a vast variety of powerful features.Once mastered, *DeluxePaint III* enables even the sort of person who usually finds drawing a stickman a Herculean challenge to create some quite stunning graphics.

But how do you get to master the system? The very immensity of features which make it so good also makes its manual an almost unfathomably daunting tome for any but the very committed. And even if you have mastered the basics, there are probably still be tricks and techniques which remain undiscovered and which can add a real professional sheen to your work.

The solution? Video tutorials, perhaps? After all, *DeluxePaint* is a graphics package, so what better way to show what it is capable of doing? It is so much better for the novice to see 'live' on screen the results of clicking on that icon, or pressing that button.

The *DeluxePaint III Tutor* from Audition Computer Services and *DeluxePaint III: The Complete Presentational Tool* from Video One are two such videos. Although in no way connected, between them they should be able to take you from the novice stage, to a quite accomplished electronic artist and animator.

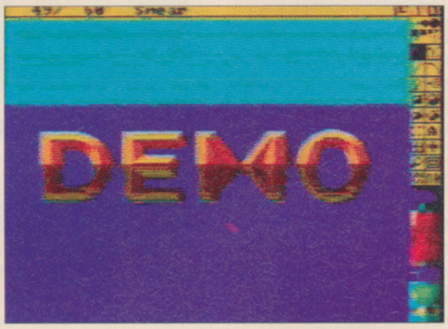
DELUXEPAINT III TUTOR

Tutor is aimed very much at the complete beginner. Through its two and a three quarter hours duration it covers everything from opening up the program and describing each tool to putting ripple effects on to the reflection of an object in water.

Basically, you spend most of the tape watching what happens on the *DeluxePaint* main screen while a female commentator tells you which buttons to press and where to stick your cursor.

Generally it is a well-structured tape, with clearly defined and logically progressing sequences. The first half an hour or so is very good in terms of the information is puts across, introducing new ideas succinctly but informatively. Concepts such as the palette and perspective are explained particularly well. But it does lose its way a bit in the middle and you might have to replay some parts more than a couple of times to understand it fully. Things pick up again when the animation section begins; it starts off showing how to achieve some stunning effects in a few simple steps.

Unfortunately, the animation section also unbalances the tape taking up well over half the tape.



• *DeluxePaint III Tutor* is aimed very much at the complete beginner

This might have been acceptable if it had been information packed, but most of this time is taken up with some incredibly boring sequences of pictures being drawn in freehand. Why not use ones they had prepared earlier in good old *Blue Peter* fashion?

Another fault with the tape is that the commentary is appalling. Not only does it use the sort of tortuous and verbose language beloved of manuals, but it is rarely in time with is happening on screen. So, for example, the commentator will say be saying, "Click on the fill icon, then click in your circle," while the cursor on screen is a minute behind, clicking on the draw circle icon.

It *is* fairly useful, but slow to the point of irritating, a tad unprofessional and overpriced. At £17.99 I imagine most budding artists would rather wrestle with the manual, which basically contains the same information.

THE COMPLETE PRESENTATIONAL TOOL

This tape also begins by telling you how to boot up *DeluxePaint*, which is odd since it is purportedly aimed at those who already have a grasp of the basics. How much more basic can you get?

Luckily things rapidly improve. Although over an hour and a half shorter than *Tutor*, and having a less structured approach, *Complete Presentation Tool* has a much more professional feel and is a far more interesting and worthwhile tape. There is a heavy emphasis on using the techniques it suggests for business presentations and video productions.

Introduced by one Iain Anderson, a graphic artist with years of Amiga experience, the tape attempts to give competent *DeluxePaint* users a few pointers on how to produce some really impressive graphics. These include marbled text, shadows and moving cog wheels.

One of the main ways in which it scores over the *Tutor* tape is that, as opposed to just telling you, 'If you do this, this happens,' it gives you examples of what you can do with the resulting effects.

So, for instance, there is a fuller explanation of creating colour ranges in the palette followed by an explanation of how they can be used to produce chrome effects. Later on, in the animation section, the tape describes a brilliantly effective, but easy to achieve, way of making light appear to gleam on the chrome.

Another useful tip shows you how to achieve cut outs without leaving jagged edges. The tape is jam packed full of tips such as these. It might be shorter than *Tutor*, but there seems to be more on it.

On the down side, it could do with a few more exercises so you can experiment with what you have learnt. It also has a tendency to gloss over major points. For example, there is a rather pointless section on using *DeluxePaint* with genlocks which does little more than give you a few examples and say, 'you too could do this,' and little more.

Again it is a little expensive, but at least it offers something more than the manual. Also, it would be very useful to companies and businesses which produce presentation packages or sale demos, and they should be able to afford £20 for a few hints and pointers. ■

VIDEO VERDICT I

DELUXEPAINT III TUTOR

FOR
- ▲ **Handy to have a visual tutorial for a graphics-based package**
- ▲ **Some basic points explained well**

AGAINST
- ▼ **Price is high for what the package has to offer**
- ▼ **Commentary is poor**

COST: £17.99
VALUE: Average

VIDEO VERDICT II

DELUXEPAINT III: THE COMPLETE PRESENTATION TOOL

FOR
- ▲ **Shows you how to create some excellent, but simple, effects**
- ▲ **Professional presentation tape**

AGAINST
- ▼ **Could do with more 'exercises'**
- ▼ **Some features are glossed over**

COST: £19.99
VALUE: Good

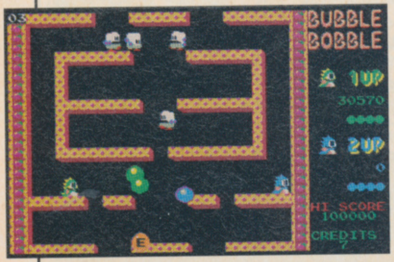
Games Week

This week somebody wrote Stuart Campbell a letter, so feeling loved and admired at last he agreed to write yet another vibrant games page...

STAR RATINGS

★★★★★ = Jupiter
★★★★ = Neptune
★★★ = Venus
★★ = Mars
★ = Uranus

CUTER THAN CUTE



• ***Bubble Bobble* – one of the extremely cute games on *The Rainbow Collection***

Cute game fans (that's fans of games which are cute, not game fans who happen to be cute themselves) will be acutely thrilled to hear of the new compilation just released by Ocean. The Rainbow Collection (£19.99 on 16-bit, £9.99 on 8-bit) features the extremely cute ***New Zealand Story***, the cutely extreme *Bubble Bobble*, and the best (and quite possibly cutest) game in the world, *Rainbow Islands*. The pack comes under the banner of Ocean's cute new Addicted To Fun label, and when we spoke to a cute Ocean spokesman, he said 'We think this is cuter than the cutest thing ever, in a cute kind of way.' Rumours that the compilation was being marketed on the back of a 'cute' motif were unconfirmed at the time of writing.

EVEN CUTER STILL

... is a phrase which has never in recorded history been used to describe Lemmy out of Motorhead, top warty slime god with the nation's most durable and most-loved heavy metal band. Nonetheless, Lem and the boys are soon to be the subject of a computer game, the licence having recently been acquired by rock 'n' roll software house Virgin. The style and structure of the game is as yet undecided, but is almost certain to feature lots of the band's unique humour, as well as some snippets of their inimitable music. You'll have to wait until next spring to see anything approaching a release, but for now you can compensate by entering this week's Prize Competition!

Yes, you can win all the prizes that we didn't give away when absolutely no-one got the answer to the last prize competition right, just by answering this simple Motorhead-related question. Which Motorhead tune features the world's best-ever line in a rock song, 'Moving like a parallelogram/Yeah'?

Easy, eh? Send your answers on an unnecessarily suggestive postcard or the back of an envelope to 'Ace Of Spades Competition' at *New Computer Express*, Future Publishing, 30 Monmouth Street, Bath BA1 2BW.

TOP 10
ALL FORMATS FULL PRICE

THIS WEEK	LAST WEEK	TITLE	PUBLISHER	MACHINE
1	1	*Man United Europe*	Krisalis	SP CO AM ST AG
2	3	*Rainbow Collection*	Ocean	SP CO AM ST AG
3	2	*Hero Quest*	Gremlin	SP AM ST AG
4	5	*Teenage Mutant Hero Turtles*	Mirrorsoft	SP CO AM ST AG OT
5	4	*Dizzy Collection*	Codemasters	SP CO AM
6	6	*Lemmings*	Pysgnosis	ST AG OT
7	10	*C15 Strike Eagle 2*	Microprose	ST AG OT
8	7	*Monkey Island*	US Gold	AG OT
9	12	*PGA Golf Tour*	Electronic Arts	AG OT
10	8	*Eye of the Beholder*	US Gold	AG OT

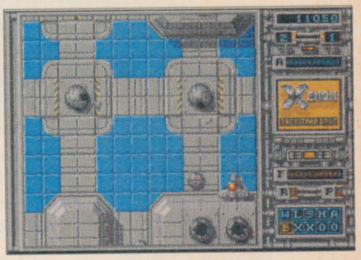
ST = Atari ST AG = Commodore Amiga PC = IBM PC or compatible SP = Spectrum
CO = Commodore 64 AM = Amstrad OT = Other.
Chart compiled by Gallup. © European Leisure Software Publishers Assoc.

HERE IT COMES AGAIN

Many's the time I've been phoned up at 3.30 in the morning by complete strangers with a burning question on their minds. The question is usually something along the lines of "How come *Gods/Brat/Street Fighter* or whatever got such a great review in *Amiga Format/Sinclair User/What Hi-Fi* or wherever when it's actually so totally awful? I hate it, all my friends hate it, I've never heard of anyone liking it except magazine reviewers".

What I normally say in reply is "Bloody hell, have you any idea what time it is? And who are you anyway? Why don't you sod off and leave me alone?". But it has to be admitted that sometimes, for a wide variety of reasons not all of which involve bribery, the most appalling rubbish does manage to garner the most stunning testimonials from the industry's hard-to-please software critics.

So, just to set the balance right a little, this week I'll be taking a look at some re-releases which all fit neatly under the umbrella title – GAMES WHICH EVERYBODY SAYS ARE GREAT BUT WHICH ARE ACTUALLY COMPLETELY CRAP!



• ***Xenon* – stylish with gorgeous graphics but it's all art and no content**

***XENON* • Mastertronic**
• £7.99 16-bit • £2.99 8-bit

The game which launched the Bitmap Brothers onto an unsuspecting world, and also the first really big, high-profile 16-bit shoot-'em-up.

In fact, one magazine of the time called it 'the first home arcade game,' to which the only sensible reply is 'and hopefully the last, if the rest are going to

NAVY SEALS
• Ocean • Amiga

SCORE
001550
TIME
02:04
5
05
1

• ***This Must Be the Place I've Waited Years to Leave.* Now you can cheat your way to the next level of *Navy Seals***

Is this game *So Hard* you just can't cope? Do the tough terrorists make your elite crew of commandos look like a bunch of *West End Girls*?

Does your *Heart* leap into your mouth every time a mean-looking arab wanders on screen?

Such problems are *Always On My Mind* too, but now there's a solution.

It's A Sin I know, but you can cheat at *Navy Seals* simply by entering your name onto the high-score table as PSBOYS. From then on, pressing 'Esc' during a game will advance you to the next level.

BEG, BORROW AND BURN

Another look at the wonderful, the so-so and the truly appalling

BEG

THUNDERHAWK • Core Design

This was described by *Amiga Power's* Jonathan Davies this month thus: 'I'd hesitate to call it the best flight sim ever, simply because it isn't one, but if it was it definitely would be.' Which pretty much says it all, I think.

Thunderhawk (or *AH-37M Thunderhawk* to give it its utterly nobby full name) is an all-action shoot-'em-up which just happens to look like a flight sim, and if airborne blasting capers are your thing, this is as much an essential buy as *R-Type II*.

BORROW

SWAP • Palace

Puzzle games are ten-a-penny these days, but really good ones are becoming rarer than hen's teeth with gold fillings in them. This unusual effort isn't in the same league as, say, *Sarakon*, but it's a novel idea which takes a less restrictive approach than most and, while tension and pressure are lacking somewhat, *Swap* is still pretty engrossing.

Which of those qualities are most important to you more or less defines whether this is a game you should get or not. Definitely too expensive, though.

BURN

LIVING JIGSAWS • The Software Business

And talking of puzzles... The jigsaw is one of the oldest puzzle concepts in the world, with a basic, natural appeal (putting broken things together again) which makes it something of an eternal pastime. It's also pretty much a physical thing, which is why putting it onto a computer is such a damn-fool idea.

All this particular version gains is some cute but inconsequential animation and the ability to cheat. Cheat! At a jigsaw! What next? What's happening to the world? Where will it end? What possesses people to do this? Why are we here?

be anything like this'.

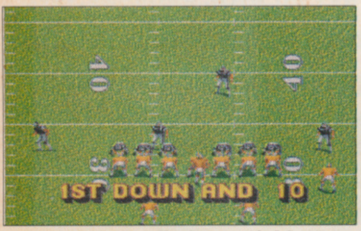
Xenon featured gorgeous metallic graphics of a kind which had never really been seen before, and gameplay of a kind which had been seen a hundred times on every machine since the Acorn Atom. Most of the time *Xenon* was simply tedious, but on occasion it could be truly infuriating, such as when a particularly dramatic burst of manoeuvering led to your ship turning into a ground-based tank at the most inopportune moment and being blasted into a thousand pieces by the little bad guys you'd been cruising safely over the heads of just seconds before.

Really, *Xenon* was the first game to turn 'style-over-content' into an artform, and gamesplayers are still paying the price for it's success to this day. ★★

TOP 10 ALL FORMATS BUDGET

THIS WEEK	LAST WEEK	TITLE	PUBLISHER	MACHINE
1	NE	*New Zealand Story*	Hit Squad	SP CO AM ST AG
2	1	*Shinobi*	Mastertronic	SP CO AM ST AG OT
3	2	*Bubble Bobble*	Hit Squad	SP CO AM ST AG OT
4	NE	*Cabal*	Hit Squad	SP CO AM ST AG
5	4	*Double Dragon*	Mastertronic	SP CO AM ST AG OT
6	3	*Magic Land Dizzy*	Codemasters	SP CO AM
7	12	*Fantasy World Dizzy*	Codemasters	SP CO AM ST AG
8	5	*Quattro Cartoon*	Codemasters	SP CO AM
9	7	*Untouchables*	Hit Squad	SP CO AM ST AG
10	10	*Multimixx Golf*	Kixx	SP CO AM

ST = Atari ST AG = Commodore Amiga PC = IBM PC or compatible SP = Spectrum CO = Commodore 64 AM = Amstrad OT = Other.
Chart compiled by Gallup. © European Leisure Software Publishers Assoc.



• Aesthetically beautiful but boring and unplayable, *TV Sports: Football* is only for American Football fanatics and it'll even drive them mad!

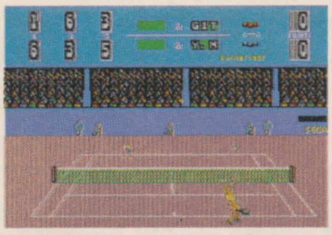
TV SPORTS: FOOTBALL • **Mirror Image • £10.99 • 16-bit only**

I have to admit to a bit of bias here, as I think American Football is probably the second most tedious sport ever invented by man (after cricket, of course), but even allowing for that, this is a non-event of a game.

The mind-numbing number-crunching of most computer American footie games is partly avoided, but not to any great advantage as far as the gameplay is concerned, and Cinemaware's usual lush presentation (read: lots and lots of impressive-looking memory-intensive static graphics meaning endless disk swapping and accessing) serves only to break things up and make the game even bittier than the real thing.

With its ad breaks every five minutes. *TV Sports: Football* undeniably looks absolutely beautiful, but for details on the value of aesthetic prettiness relative to lasting playability of a game, see *Xenon*. ★

PASSING SHOT • **Mirror Image • £7.99 16 bit • Hit Squad • £3.99 8-bit**



•Whatever was the hack thinking of to call it a 'corker of a game'? Whatever it was he should just have said 'no' and told the truth – it's awful

'*Passing Shot* is a corker of a game' – *Amiga Action*. 'You will more than enjoy this game, you will love it!' – *Amiga Action* again.

'It's not even worth getting the disk in order to re-fomat it. Don't touch it with a sanitised barge pole' *New Computer Express*. Just say no. ★ ■

HATSTAND CORNER

Okay, so you all know by now that EMAP have bottled out of the CES show at Earls Court this year, leaving only a yawny old trade show and denying thousand of punters the opportunity of forking out seven quid to meet Jakki (sic) Brambles and some grumpy shortarse in a foam-rubber Turtle suit. (Hey, you'd be grumpy too if you had to wear something like that in the inferno of sweat and neon that is the average consumer show.)

What you might not have known is that the real reason for the pull-out is not, as previously stated, lack of industry support. Nope, the true story behind the sudden switch is that a top EMAP Images executive had a dream on the eve of his recent wedding that if the show went ahead, his lovely bride would grow a bushy black moustache, put on three stone in weight, shrink to four feet in size and develop a worrying predilection for eating mushrooms and speaking in an Italian accent.

He swiftly decided that this was a fate which had already befallen quite enough of his employees, and gave the word for the whole plan to be swiftly abandoned. When asked to comment on the allegations, an EMAP spokesman would only say "Mama mia, what-a load a old-a bolognese".

Rumours of a replacement show called Super Nintendo World 4 were unconfirmed at the time of writing.

MONSTER BUSINESS

Eclipse • ST, Amiga • £19.99 ★★★★★

Tacky continental packaging, singularly unimpressive screenshots on the box, and the very fact that it's a European game (you know, like *Ghost Battle*, *Cougar Force*, *Lupo Alberto*, *Metal Masters*, *Quadrel* etc etc), filled me with a grim sense of foreboding.

Feeling a wave of xenophobia rising inside me, I decided that for the sake of my own ideological soundness I'd better sit down, bite the bullet, and give it the closest thing I could manage to an objective review. So here goes with an objective review.

This is the most fun I've had with a computer game since I started writing for games magazines. In fact, I was so impressed with it, I did something I haven't done with any other game ever, and took it home with me so I could play it some more. It's basically a cross between the creaky old Atari coin-op *Dig-Dug* and the brand spanking new hardly-seen-at-all Toaplan coin-op *Snow Bros*.

You find yourself on a screen of platforms and slides infested with nasty bug-eyed monsters, and your objective, unsurprisingly, is to get rid of them all. What makes *Monster Business* so much fun is the way in which you have to do it.

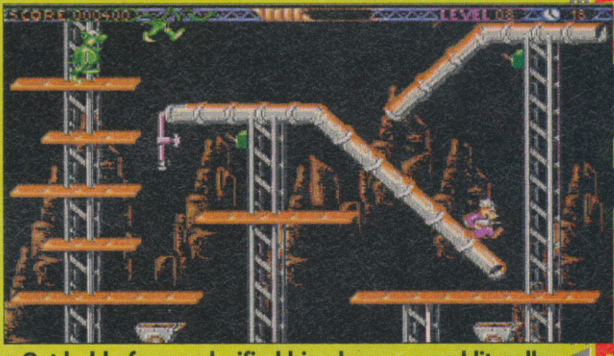
Armed with a glorified bicycle pump, you have to pump the baddies full of air until they become so inflated that they float away off the top of the screen, throwing out bonus-point objects as they do so. While they're floating up, you can biff them and send them flying horizontally across the level, where they'll knock out any other nasties they happen to collide with.

These are the first two gameplay rules. The third gameplay rule is... there is no third gameplay rule. Yes, it's even simple enough for Jimmy Greaves to understand, but with 45 levels of gradually increasing difficulty, new and tougher monsters to contend with, and deviously-designed sets which will having you throwing the joystick around the room in frustration.

But the magnificently designed gameplay isn't all *Monster Business* has got going for it. Endearing graphics help too, as does the fact that the whole graphic style changes after 15 levels or so, just when it could get a bit repetitive. Also, the fact that it's set in that classic of computer game settings, the building site, somehow makes it better still.

The best feature of this game packed with great features, though, is the sound. On the Amiga it's excellent tunes played with the skill you'd expect from continental programmers (always technically good, if often lacking in melody), combined with subtle effects, although the jingle that plays when you lose a life is over-loud and jarring.

On the ST, though... in ten years or so of playing literally thousands of computer games, I can count the number of times I've simply sat and listened to the music, unwilling to actually press FIRE and get on with the game, on the toes of a three-toed sloth. When I loaded up *Monster Business* on my ST at home (the game comes, groovily-beyond-belief, on a dual-format disk) I was expecting to play the same game, but all set for the usual sonic disappointment. What I actually got was music and sound effects superior to the Amiga on all counts (ie: melodically and technically), with thumping bass and phased drums that even The Jesus And Mary Chain would be proud of.



• Get hold of your glorified bicycle pump and literally blow those baddies up. Or there again you could just sit and listen to the wonderful music – either way, *Monster Business* is a game worth having

The tunes on the ST version are loaded in randomly every four screens (this takes about three seconds, though they're all nearly four minutes long), and on catching a particular one, I sat for 15 minutes staring at the 'Game Over' message so that I wouldn't have to stop it playing. I've never heard anything sound this good on an ST, and nothing this good actually during a game on any machine.

At this price it's almost worth buying *Monster Business* just for the sonics .And when you get such an utterly superlative arcade game thrown in at the same time, then you had better purchase yourself a copy pronto or suffer the indignity of having schoolchildren more games literate than you point and laugh at you in the street for the rest of your life.

NO ONE TAKES A GAME APART LIKE AMIGA POWER

BRITAIN'S BEST-SELLING AMIGA GAMES MAGAZINE!

FIRST COMES THE REVIEW...

AMIGA POWER reviews more Amiga games than any other magazine! At least 40 new full price, budget and PD – plus almost 300 older games – rated every month!

AMIGA POWER gives them more space too – up to four (or more!) pages for the games that really deserve it!

Giant maps take you through every level of the game.

100 percent colour! There isn't a single black and white page in AMIGA POWER, and that includes every last game review!

Giant linked screen grabs show you exactly what the game looks like overall.

TOKI

LEVEL ONE – THE LABYRINTH OF CAVES

IN THE BEGINNING...

TOKI CREATURE COMFORTS

HE'S AN APE, APE MAN...

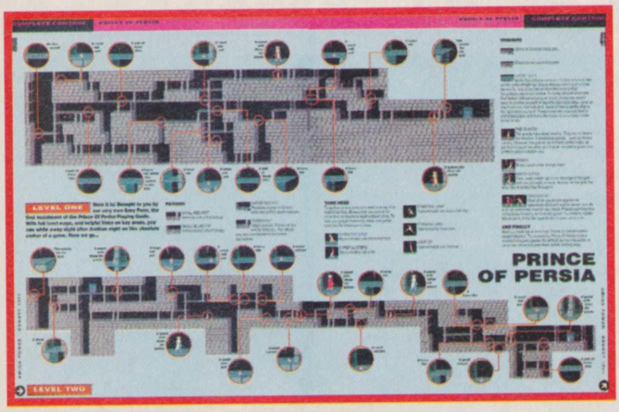
The Bottor Line – quit simply, the clearest, toughest scoring system ye devised.

Big name reviewers, including Matt Bielby, Colin Campbell and Gary Penn.

All is revealed – from each baddy's hit points to how much you'll earn if you kill him...

...while boxes, panels and annotated screens explain all the details.

Large size paper (the same as this new look Amiga Format) gives games more room to breath!



PRINCE OF PERSIA

...AND THEN THE TIPS

- AMIGA POWER carries more pages of tips per issue than any other Amiga magazine (or any other games magazine at all, for that matter).
- Giant maps take you through every last screen of the game – some of our complete player's guides have run to well over ten pages!
- Every object, every trap and every enemy revealed.
- And, of course, all our hero's abilities made crystal clear.

NOT TO MENTION...

- THE AMIGA POWER COVERDISK brings you the greatest demos and the best PD games every month.
- The AMIGA POWER team have quickly earned a reputation as the toughest reviewers in the business. If we say a game's good, you can be sure it will be – because we don't say it very often!
- PLUS! The most EXTENSIVE news coverage, the BEST competitions, the MOST IMAGINATIVE covermounts, and more interviews with the people BEHIND the top games than any other magazine.

If you're into Amiga games you should be into AMIGA POWER

August issue out now
September issue out
August 28th
ONLY £2.95

TOASTING BIG BLUE'S PRINTER

Not satisfied with its reputation in the computer market, IBM now wants to increase its share in the printer stakes. Tim Howell checks out the IBM 2380 dot matrix printer to see if it's got what it takes

PRODUCT:	**IBM 2380 dot matrix printer**
COMPATIBILITY:	**PC, Amiga, ST**
FROM:	**Lexmark/IBM**
CONTACT:	**081-578 9342**

In the past, IBM has been largely known for its computers. Sure, the company has produced printers and other peripherals, but these have played second fiddle to its PCs and mainframes. However, with the recent appointment of Lexmark as retailer of IBM's printers, an onslaught on the printer market is about to begin. In the past, Lexmark has been responsible for developing IBM's typewriters, amongst other things.

The IBM 2380 is but one of the weapons in the company's new armoury. This little baby is a 9-pin model, aimed at computer users who want a heavy-duty workhorse to print out labels and forms in bulk.

TOAST ANYONE?

When the printer is first taken out of its box, it seems as if IBM has sent the wrong product – the machine looks suspiciously like a toaster, and it's no surprise that it has been nicknamed this by the company.

Although it may look different, functionality is another issue. The printer's squarish exterior is designed for a reason, and within it lie a number of paper entrances and options.

For a start, the front panel of the printer can be opened up to accept single sheet paper. This same panel can be lifted up another way to accept continuous flow paper. At the rear of the machine is another paper entrance, and one more underneath it. All these different entrances mean that paper can be stored and fed in a number of ways, and the user has a choice of where they can put the printer on their desktop.

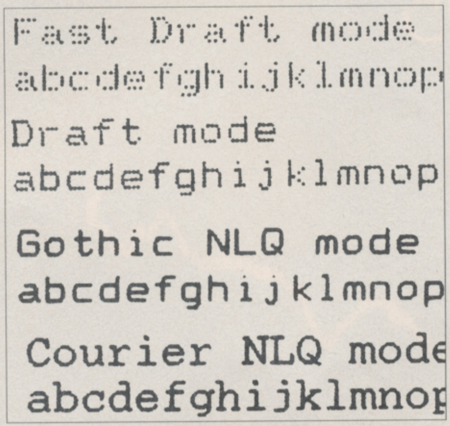
One special feature of the 2380 is its straight paper path. When paper is fed into the machine it goes directly under the print-head, and straight out the other end. The advantage of this is a much smoother way of feeding the printer paper, which is printed on with as little delay as possible.

A control panel which is positioned on the front of the machine controls the printer. This is laid out very sensibly; the main paper feeding functions are all easily accessible while other, less frequently used functions such as a printing demostrator, are available by pressing the 'Alt' key on the panel.

LOCK IT UP

One problem of many dot matrix printers is that applications software often overrides the way they have been set up. While this is handy at times, it can be an irritant when you, say, change applications and a document is printed out differently. This isn't a problem with the 2380 as it can remember the way it's been set, even after it has been turned off.

When the printer has been locked with these settings there is no way software can change the configuration. However, resetting the printer is not a hassle, and can be easily done via the front panel.



Fast Draft mode
abcdefghijklmnop

Draft mode
abcdefghijklmnop

Gothic NLQ mode
abcdefghijklmnop

Courier NLQ mode
abcdefghijklmnop

• **This is an example of the four standard fonts that the IBM 2380 has built-in**

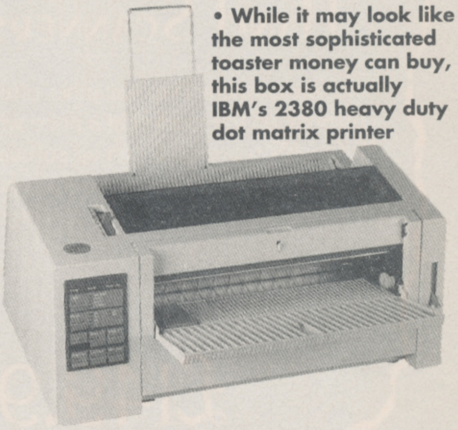
A BIT OF A DRAFT

There are three different modes for printing: fast draft, draft and near letter quality (NLQ). In fast draft mode the machine can zip along at a brisk 320 characters per second (cps), while in draft mode is can run at 270cps. The output quality between the two different draft fonts, is insignificant, so it is worth using the fast draft for speed of printing.

In NLQ mode Courier and Gothic fonts can be used, both printing at 65cps. The NLQ modes compared to other printers is of good quality, but does not dramatically improve on the draft modes. If needed, extra fonts can be downloaded from your machine and saved into the printer's memory buffer.

Printing speed is helped by a 43K printer buffer which enables you to send data from your machine, which the printer will then store, freeing up RAM for other duties. Several pages can be stored in 43K, so it is enough for most letter writing and basic printing tasks.

For a printer that's as fast as the 2380, its mechanism is surprisingly quiet in operation and the noise is further reduced by the foam padding insulating the printer's case.



• **While it may look like the most sophisticated toaster money can buy, this box is actually IBM's 2380 heavy duty dot matrix printer**

I GOT THE BLUES

The 2380 is not a high quality printer, but is ideally suitable where quality is not a priority, such as label printing. The £439 price tag on the 2380 means it will have to compete with printers that have better looking output, such as ink and bubble jet printers.

The IBM label may be the main reason for the high price tag – it is sometimes worth paying a high price when you know you will get good quality, after purchase service and backup facilities, and IBM certainly has a reputation for all these.

Even without its IBM pedigree, the 2380 dot matrix printer is a solid and very useful performer. Its box-like design is functional, the paper-feeding mechanisms are

TOASTER SPECIFICS

Speeds (at 10 cpi):	320 cps fast draft mode. 270 cps draft mode. 67 cps NLQ
Pitch:	10, 12, 15, 17 or 20 cpi
Interface:	Parallel (RS-232/RS-422 serial interface optional)
Dimensions:	190 x 495 x 286 mm
Weight:	6.7kg

WORTH EXTRA DOSH?

FOR
- ▲ **Functional and useful design**
- ▲ **Solid performer**
- ▲ **Large number of paper handling functions**

AGAINST
- ▼ **Although functional, the printer's design may take a bit of getting used to**
- ▼ **Is the IBM name worth paying for? You decide**

COST: £439
VALUE: Good

COMPETITION: Star, Citizen

WHAT HAVE GOLDENIMAGE (UK) AND FORK LIGHTNING GOT IN COMMON?

They're both flash? Bright? Electrifing? Shocking? The answer is, of course, nothing - absolutely nothing.

Actually, there is some connection. Our MD was struck by lightning recently and there's no way that I'd recommend standing outside in a storm as he's gone crazy. He now drives like a loon (in his Robin Reliant), runs around the office making "hoop! hoop!" noises, has had his hair restyled - forcibly, and has decided to offer obscenely low prices on all GoldenImage products.

So, how do you take advantage of these stupid offers? The answer to that is simple. Just come along to the GoldenImage stand at the 16-Bit Computer Show (stand 11), ring or come to the office armed with some cash, credit card (Access or Visa) or a cheque and we'll happily exchange it for goods to the same value.

Incidently, did you know that we've moved? Gone are the days of ramshackled buildings where the mice run around the floor and up your legs. Now we've rounded them all up and have caged them so they're easier to catch and box up when you come to order. Even the lightspeed optical mice have been captured and caged (our stores person died of exhaustion after this chase).

HAND SCANNERS

The GoldenImage Hand Scanner offers more than any other unit currently on the market at a price which is lower. Supplied with Mi-Graph's supreme Touch-up software, the 400 dpi scanner with it's 64 level dithering pattern regularly out-performs other units with fewer features and at a higher price.

£149.95

ST or Amiga

OPTICAL MICE

Optical Mice operate on light, infrared light and don't have a ball. This means that they are far more accurate and infinitely more reliable because there are no moving parts.

£29.95

ST or Amiga

£35.95

PC/MS Serial
ST/Amiga Switchable

£39.95

PC deluxe.

SPECIAL OFFER

GoldenImage recognises that there's a recession on at the moment and we respect that you haven't got as much money as you used to have (unless you're stinking rich in which case you can pay full price matey) so we're willing to do you a favour but only if you own an ST.

Buy a GoldenImage Hand Scanner fot the Atari ST and get a free receipt! Not only that but present this advert at the time of purchase and save £10, yes an amazing ten smackeroonies on the purchase of either an opto-mechanical or optical mouse!

SAVE £10!

SEE US AT THE 16 BIT COMPUTER SHOW ON STAND 11

OPTO MECHANICAL MICE

GoldenImage opto-mechanical mice offer a inexpensive method of upgrading your computer. A GoldenImage mouse invariably out-performs standard mice by a ratio which we really couldn't be bothered working out. For the technofreaks amongst you, a mouse is a small hand-held unit which you glide over a flat surface in order to move a pointer on a computer screen.

£19.95 ST/Amiga switchable with pocket and quality mouse mat

£24.95 IBM PC Serial with mat & driver software

Suite 12a, Millmead Business Centre,
Millmead Road, London, N17 9QU
Tel 081 365 1102 Fax 081 801 8356

GOLDENIMAGE (UK) Ltd.

THROUGH THE LOOKING GLASS

Virtual Reality has arrived in London and the kids are queueing up to have a go. Neil Jackson stepped through to the other side to explore its wonders for himself...

Earlier this month two new virtual reality arcade games were launched by W. Industries, the company which this spring pioneered VR with its stunning Virtuality system. The new games use advanced Virtuality cabinets and headsets to provide totally different experiences which complement the existing VTOL Harrier simulation and Battlesphere space shoot-'em-up.

For the thrill-seeking gamer, there's now *Total Destruction*, a stock car smash-'em-up driving game, and *Nightmare*, a strange 3-D adventure in which you play the hunter and the hunted. Both games use linked machines to provide an interactive experience, where you compete against other Virtuality users in real time.

ARE YOU EXPERIENCED?

As before, the games are colourful, fast and loud, and the overall result is an all-encompassing, highly intense experience, where you become completely disconnected from reality, albeit for only five minutes. The experiences are enhanced by the knowledge that you are competing against real people (rather than program-controlled enemies), and the encapsulating quadrophonic sound and three-dimensional visuals.

> **"The installation of the cyberspace network confirms our commitment to serving the best of everything, not just great food!"**

Creating the illusion is the job of the most sophisticated part of the Virtuality system – the head set. Called the Visette, this unit (which is rather like a helicopter pilot's gun-sight) fits over the top of your head, covering both eyes and ears. Set inside the headset are two small LCD TV screens, each relaying a slightly different picture to each eye to give the illusion of perspective and depth. As you move your head, the pictures update, panning and tilting, to give full 360 degrees coverage. You can look up, down, behind you, anywhere, and the screens show what you'd see in that direction. Try doing that on an Out-Run!

At the sides of the Visette, four speakers boom out the sound effects, varying the stereo sound levels as you turn your head in relation to the visual source of the noise. Thus a complete 3-D illusion occurs and, after a very short familiarisation period, you feel completely at home, turning your head, following the sounds and sights... and playing a game too.

MEETING OF MINDS

The rest of the system handles the normal arcade machine inputs – joysticks, steering wheels or foot-pedals. These move your 'virtual ego' around the virtual world, just as in any other arcade. The neat trick lies in the way several Virtuality systems can be linked

NIGHTMARE IN COVENT GARDEN

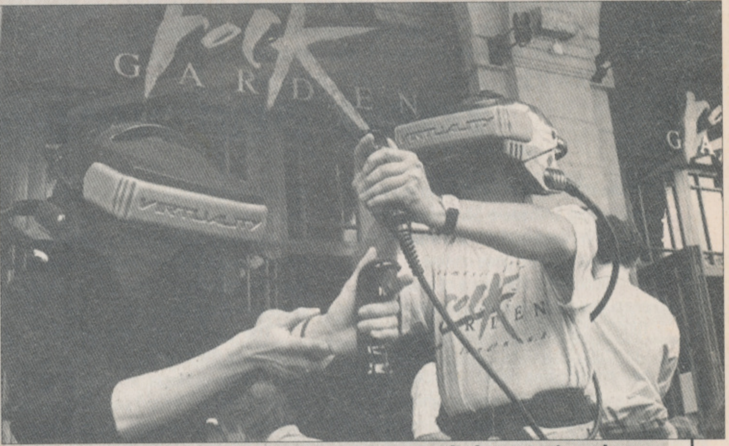
In the heart of London's bustling Covent Garden, the Rock Garden Restaurant is the home of the first Virtuality 1000 CS (cyberspace) system. The system consists of two machines linked together to provide two-player simultaneous action. It's configured to run a game called *Nightmare* which was written for W. Industries by Zona Ltd, suppliers to the Rock Garden. *Nightmare* is a head-to-head, hunter versus hunter adventure set in a 3-D world full of strange platforms and dangerous creatures.

It's different from sit-down games in several exciting respects. Each Virtuality 1000CS unit has a glass-sided podium which you stand inside, wearing a Visette headset unit. Your hand-held joystick controls movement forward and backward in the virtual world and fires your virtual weapon. The position of the entire joystick assembly is sensed by the 1000CS system, not just the position of the stick, so that a computer-generated hand and gun can be displayed in the Visette. The view updates as you move your hand around.

The headset and joystick are coupled together with large space-age cables which disappear into a small black box that's strapped to your back. This, in turn, is connected to the podium itself and from there to the other 1000CS unit. Tall players may literally get wrapped up in it!

Once you're kitted up you enter a surreal playing world, made up of flat platforms suspended in space, across which you can walk. Short stairways link several platforms together, enabling you to climb around searching for your opponent. Archways, blocks and strange 3-D objects litter the play area providing you with cover and places to hide inside.

Your objective is to find your opponent (who's playing from the other 1000CS, on the other side of the restaurant) and shoot him. Though it sounds easy, you must be careful that you don't fall off the edge of the platforms into oblivion. It's a long drop, even if it is imaginary! Just standing still can be dangerous too: giant green pterodactyls swoop down from above and carry you high into the sky before dropping you back onto the play floor. A strange experience! If you can cope with all this and find your opponent before he finds you, you're probably the sort of person who finds free-fall parachuting a bit of a bore. More likely, you'll be awe-struck like most of the first-timers who've just stepped off a Virtuality machine.



• Have a *Nightmare* during your post-prandial nap! Virtual Reality is now installed at the Rock Garden, Covent Garden

The 1000CS stands to attract a good deal of attention from the crowds which frequent Covent Garden. You might think this would be a bit inconvenient in a place like the Rock Garden which is, after all, a restaurant and a nightclub.

Rock Garden's Managing Director, Arthur Wickson had this to say on the matter: 'We're known for being more than just a place to eat and the installation of the cyberspace network confirms our commitment to serving the best of everything, not just great food!'

Don't try to eat your meal with your Visette on, or attempt to eat the succulent-looking fish in *Nightmare*. Apart from being virtually impossible, they're not good for the digestion.

TROCADERO
CENTRE
THE EXPERIENCE OF A LIFETIME

• In a virtual world of their own – the sit-down cyberspace system running *Total Destruction* attracts the punters to the Trocadero Centre, Piccadilly, London

WHO'S W?

Founded in 1987, W. Industries Ltd. is the brainchild of Dr. Jonathan Waldern, MD, designer of the Virtuality system. It's part of the Wembley Plc group worth £145m of turnover in 1990) and it is the first company to manufacture and market a virtual reality machine.

To meet the increasing demand for Virtuality, W. Industries have moved this month to a new factory in Leicester where all the units and software are built by 22 full-time employees. This factory is currently churning out 16 Virtuality units per month and is soon to boost this to 30.

Virtuality units sell at £20,000 for the sit-down or SD machine and £35,000 for the cyberspace (CS) stand-up unit. W. Industries exports around 70 per cent of its production, and supplies a number of blue-chip companies from Japan and recently the USA.

As demand increases further, W Industries intends to license manufacture to outside sub-contractors. "We're taking it one step at a time," says Waldern on the subject of future expansion.

together, with each machine passing its player's inputs to every other machine on the network.

In this way, each machine can decide where every outside player has moved to, what their actions are, and what that looks like from the point-of-view of the player in charge. Everybody's Visette view is different and entirely independent of everybody else but, at the same time, each player experiences the same virtual world.

Clearly, the applications of the Virtuality system are only just beginning to be discovered. With four games now under their belt and in production, W. Industries are better placed than any other company to advance the technology and find new uses for it.

LIVING IN A VIRTUAL WORLD

W. Industries recently obtained American Federal Communications Commission (FCC) clearance for the design of the Virtuality cabinet. This US government regulatory department is responsible for maintaining strict control over the amount of radio and TV interference which is allowed into the atmosphere.

According to its inventor Dr Jonathan Waldern the Virtuality system "wasn't originally designed to be clean," (in radio emission terms). "It was designed to work!" The machine needed a slight redesign to pass the FCC tests, mainly in the screening of electronic components and cabling. The new 'radio-friendly' design opens the way for export to the USA and Waldern hopes to use this to enhance the system further. Waldern plans to set up more Virtuality Centres in the UK and the USA and then link each centre together via satellite and High-band Ethernet. This is to be the first step on the road to giving Virtuality players the opportunity to compete against other players anywhere in the world.

SAFE AS VIRTUAL HOUSES?

The Virtuality system has been subjected to more health and safety tests and reports than any other arcade system, on Jonathan Waldern's own instruction. Twelve separate tests were conducted and all were passed with flying colours.

Waldern wanted to be especially sure that the Visette helmet system was safe and hygienic in every respect. He understands fully the dangers of an untested machine in both the physical and psychological aspects: "We call the programs that run on our Virtuality systems 'experiences' rather than 'games'. Once you've been in one you'll understand why!" And that's why Waldern ordered such stringent, self-inflicted testing.

"If *The Sun* got hold of a bad story and ran it," says Waldern with genuine concern, "every mother in the country would ban their kids from using Virtuality. We wanted to know everything was safe."

Waldern then relayed the tale of a poor chap from the American ABC TV network who'd suffered an attack of the wobblies when his 'virtual ego' was dropped from a great height in the *Nightmare* game. Waldern and his team "comforted him and gave him reassurance and cups of water after his knees buckled". Soon afterwards, he was perfectly well again and was eager to have another go, when he'd got his breath back. Is this the first recorded case of cybersickness?

VISIONS OF THE FUTURE

Arcade games will attract the leisure market, but with a few simple software changes, the same machine could provide trips around building designs, engineering drawings or even the human body. The time, money and lives that could be saved by using virtual reality rather than embarking on a disastrous building project or a complicated heart operation, is clear. These serious applications are the tip of a totally unexplored iceberg, which already looks as if it's been harnessed and towed away by W. Industries, virtually. ■

TOTAL DESTRUCTION IN THE WEST END

On the other side of London, in the just-as-bustling Trocadero Shopping Centre, Piccadilly, the world's first Virtual Reality Simulation Centre goes on-line.

Occupying the space of a small shop, the centre features four modified 1000SD cabinets, all linked together. Currently, they're all running a stunning four-player game called *Total Destruction*. It's a stock car racing game which puts you in the driving seat against seven other cars, four computer-controlled and three controlled by the other players in their cabinets.

Manager Alan Rawlinson said the centre is: "to provide the best gaming experience available in the world, but more than that, we expect it to become a spectacle in itself, providing entertainment for participants and spectators alike".

And a spectacle is indeed what it is, for outside, on the front of the centre, six overhead TV screens relay the drivers'-eye views and two action-camera views to spectators and surprised passers-by. Chances are you'll be watching these as you queue up to buy your smart-card (which operates your Virtuality machine) from the cashier. Costing £2, these give around five minutes racing action.

The machines are redesigned versions of the original VTOL and Battlesphere cabinets. In addition to the usual CD quality sound and 3-D graphics from the Visette headset, car controls have been added in the form of brake and accelerator pedals and a steering wheel.

When at last you're sitting comfortably with your Visette on and the adrenaline pumping madly, it's race time! You find yourself looking from the driving seat of a virtual car. It's no ordinary arcade car, though. You can look round in your seat and see the dashboard, complete with dials, and the struts of the doors and windows. Ahead of you can see cars, stretched out on the grid, waiting for the lights on the gantry to change.

Green! They're off! The aim of the game is to race around avoiding the fences which surround the whole circuit, taking your cue from giant overhead arrows. They lead you round a huge figure of eight which has a precipitous jump bridge in the centre. If you don't get smashed to bits just doing this, then you'll probably get rammed by one of your opponents instead. Alternatively, you could be the one ramming them!

Ruined cars explode, spraying pieces everywhere and, if the unlucky car happens to be yours, the camera view zooms out with the explosion, giving you a birds-eye view of your own demise. After a moment's pause, you return to your car which you can see reassembling itself in front of you. The camera follows a smooth, sweeping path which takes you into your seat through the car's back windscreen! But there's no time to go "Wow!," you're back in the race.

At the end of the race it's your position which is important, not whether you crossed the finish line. The more time you spent watching yourself crash, the more places you're likely to have lost. If you were looking out the back window while reversing into people, then you may have fared better. Whatever your tactics, you stand little chance of winning against the computer cars on your first go. Maybe you beat your mates, though. Most people are just glad to still be alive!

For three days prior to the launch of the centre, the system was tested on kids and other interested visitors to the Trocadero Centre. Virtuality designers and software programmers were on-hand to gauge the response of the general public to the new experiences. "The kids are the toughest critics," says Jonathan Waldern. But he's still more than pleased with the comments and suggestions that were received. "It'd be great to set up a software development unit above the VR Centre in the Trocadero and do this all the time". This may be dreaming, but Waldern is a man who's so far built his business by making dreams come true...

520ST
ATARI
Discovery Xtra
4 GREAT GAMES
3 STARTER PROGRAMS
AND FREE JOYSTICK
520ST
TENSTAR GAMES PACK
SPELL IT!
ST BASIC

ATARI ST
520ST-E DISCOVERY XTRA PACK

HARDWARE:	
512K 520ST-E + MOUSE	£329.99
ENTERTAINMENT SOFTWARE:	
ANARCHY - *Arcade Game*	£19.99
DRAGONS BREATH - *Adventure*	£29.95
INDIANA JONES - *Arcade Adv*	£19.95
SUPER CYCLE - *Racing Game*	£19.95
PRODUCTIVITY SOFTWARE:	
CONTROL.ACC - *Utility Software*	FREE
EMULATOR.ACC - *Utility Software*	FREE
FIRST BASIC - *Programming*	£49.99
NEOCHROME - *Art Package*	£29.99
ST TOUR - *Tutorial*	£4.99
JOYSTICK CONTROLLER:	
ATARI CX40 JOYSTICK	£4.99
PLUS! FREE FROM SILICA:	
TENSTAR GAMES PACK	£219.78
PRODUCTIVITY PACK	£104.97
TOTAL VALUE:	£834.54
YOU SAVE:	-£505.54
SILICA:	£329

PLUS! FREE HOLIDAY ACCOMMODATION

£329

RETURN THE COUPON FOR A FREE! COLOUR CATALOGUE

FAMILY CURRICULUM
ATARI

1040ST-E FAMILY CURRICULUM PACK

The Family Curriculum Pack comes with a 1040ST-E computer and mouse plus 5 software modules (3 titles in each), one for every age range. The combination of education, creative and business software from Atari, plus the FREE entertainment and productivity packs from Silica, makes for a package the whole family can enjoy!

PLUS! ***FREE*** HOLIDAY ACCOM

1Mb 1040ST-E + MOUSE	£399.99
1. PLAY & LEARN	£76.59
2. JUNIOR SCHOOL	£58.54
3. GCSE REVISION	£55.54
4. BUSINESS COMPUTING	£159.85
5. CREATIVE COMPUTING	£134.97
PLUS! *FREE FROM SILICA*	
TENSTAR PACK	£219.78
PRODUCTIVITY PACK	£104.97
TOTAL VALUE:	£1210.23
YOU SAVE:	£811.23

£399

SILICA PRICE - INC VAT + FREE DELIVERY

ATARI 520ST-FM DISCOVERY PACK

£279

INC VAT + FREE DELIVERY + FREE TENSTAR & PRODUCTIVITY PACKS

ATARI ST - MORE THAN JUST GREAT GAMES!

FREE! FROM SILICA WITH EVERY ATARI ST

TENSTAR GAMES PACK

The TenStar Games Pack is THE software compendium for Atari ST owners, featuring ten top titles with a variety of different types of games for you to enjoy. Each title is packaged in its own plastic case, with a colour sleeve and full instructions. The TenStar Games Pack is FREE! when you buy your ST from Silica Systems.

FREE! WORTH: **£219.78**

TENSTAR GAMES PACK
Asterix
CHESS PLAYER 2150
LIVE AND LET DIE

TOTAL FREE PACKAGE

TENSTAR GAMES PACK - £219.78:	
Asterix - *By Coktel Vision*	£24.99
Chess Player 2150 - *By CP Software*	£24.95
Drivin' Force - *By Digital Magic*	£19.95
Live & Let Die - *By Elite*	£19.99
Onslaught - *By Hewson*	£19.99
Pipe Mania - *By Empire Software*	£24.99
Rick Dangerous - *By Firebird*	£24.99
Rock 'n' Roll - *By Rainbow Arts*	£19.99
Skweek - *By US Gold*	£19.99
Trivial Pursuit - *By Domark*	£19.95
PRODUCTIVITY PACK - £104.97:	
1st Word - *Word Processor*	£59.99
Spell It! - *Spell Checker*	£19.99
ST Basic - *Programming Language*	£24.99
TOTAL RRP:	£324.75

FREE! WORTH NEARLY: **£325**

PLUS! ***FREE*** HOLIDAY ACCOMMODATION

FREE! SILICA SYSTEMS ST PRODUCTIVITY PACK

Every Atari ST from Silica comes with a FREE Silica ST Productivity Pack, worth over £100. This pack has been specially put together by Silica to help you to get to grips with the productive side of computing from day one. Each title has been tried and tested by tens of thousands of Atari ST owners, who have begun word processing with 1st Word and programming with Atari ST Basic.

ST BASIC
SPELL-IT!

1st WORD - from GST	£59.99
SPELL IT! - for use with 1st WORD	£19.99
ST BASIC - with tutorial	£24.99
TOTAL RRP:	£104.97

FREE! 16 NIGHTS HOLIDAY HOTEL ACCOMMODATION

Every Atari ST from Silica comes with a FREE 72 page, full colour brochure with accommodation vouchers. These vouchers entitle 2 people to stay up to 16 nights in one hotel (or any number of hotels to a total of 16 nights) with accommodation FREE (you could take up to six nights for four people, or other options). Choose from the 250 hotels featured in the catalogue. All you have to pay for are your meals (prices are listed in the brochure). Reduced rates in top London hotels and hotels in France are also featured.

SILICA SYSTEMS OFFER YOU

- ***FREE OVERNIGHT COURIER DELIVERY:*** On all hardware orders shipped in the UK.
- ***TECHNICAL SUPPORT HELPLINE:*** Team of Atari technical experts at your service.
- ***PRICE MATCH:*** We normally match competitors on a ''Same product - Same price'' basis.
- ***ESTABLISHED 12 YEARS:*** Proven track record in professional computer sales.
- ***BUSINESS + EDUCATION + GOVERNMENT:*** Volume discounts available for large orders.
- ***SHOWROOMS:*** Demonstration and training facilities at our London & Sidcup branches.
- ***THE FULL STOCK RANGE:*** All of your Atari requirements from one supplier.
- ***FREE CATALOGUES:*** Will be mailed to you with offers and software/peripheral details.
- ***PAYMENT:*** By cash, cheque and all major credit cards.

Before you decide when to buy your new Atari ST computer, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after buying your ST, when you may require additional peripherals or software, or help and advice with your new purchase. And, will the company you buy from contact you with details of new products? At Silica Systems, we ensure that you will have nothing to worry about. We have been established for over 12 years and, with our unrivalled experience and expertise, we can now claim to meet our customers requirements with an understanding which is second to none. But don't just take our word for it. Complete and return the coupon now for our latest Free literature and begin to experience the ''Silica Systems Service''.

☎ MAIL ORDER HOTLINE 081-309 1111

SILICA SYSTEMS

MAIL ORDER: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX **Tel: 081-309 1111**
Order Lines Open: Mon-Sat 9.00am-6.00pm No Late Night Opening Fax No: 081-308 0608

LONDON SHOP: 52 Tottenham Court Road, London, W1P 0BA **Tel: 071-580 4000**
Opening Hours: Mon-Sat 9.30am-6.00pm Late Night: Thursday until 8pm Fax No: 071-323 4737

LONDON (SELFRIDGES): 1st Floor, 369 Oxford Street, London, W1A 1AB **Tel: 071-629 1234**
Opening Hours: Mon-Sat 9.30am-6.00pm Late Night: Thursday until 8pm Ask for extension 3914

SIDCUP SHOP: 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX **Tel: 081-302 8811**
Opening Hours: Mon-Sat 9.00am-5.30pm Late Night: Friday until 7pm Fax No: 081-309 0017

T2
CBM AMIGA
ATARI ST
SPECTRUM
AMSTRAD
COMMODORE
registered trademark of LJN Ltd.
LJN. All rights reserved.
tional N.V. All Rights Reserved

GET READY FOR A WORLD FIRST!

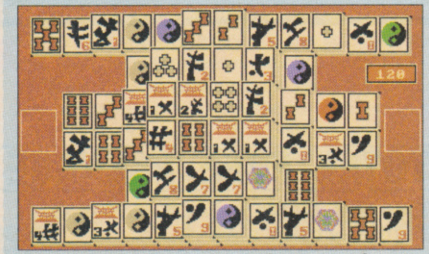
– A TRI-FORMAT COVER DISK EVERY WEEK!

Yes that's right, next week *New Computer Express* will become the only magazine in the world to publish a tri-format – yes, that's *tri-format* – disk; and we won't be doing this once a year or once a month, but *each and every week*.

This amazing addition to your favourite magazine will contain software for the three most popular 16-bit machines: the Amiga, Atari ST and PC compatibles.

On every disk will be top demos of forthcoming games and applications, plus public domain and shareware games, utilities and applications, reader contributions and a whole lot more.

So what wonderful goodies will we be giving you first? Well, check these out:

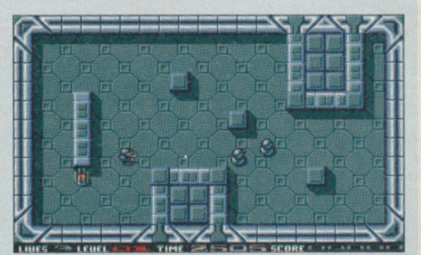

• China Challenge II - infuriating fun!

FOR YOUR AMIGA:

China Challenge II – a ridiculously compulsive Chinese puzzle game

AND

bBase II – a feature-packed yet easy to use database



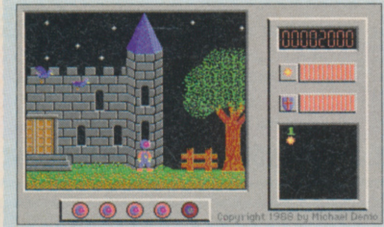
• Robotz - marvellous maze madness!

FOR YOUR ST:

Robotz – an incredibly addictive arcade adventure game

AND

ViewGIF – an image conversion utility for handling every graphic image standard



• Captain Comic - serious lunacy!

FOR YOUR PC:

Captain Comic — a brilliant platform game

AND

Canary – a demo version of a great anti-virus shareware utility

SO GO FOR IT! – AND MAKE A BIT OF HISTORY!

Manager Alan Rawlinson said the centre is: "to provide the best gaming experience available in the world, but more than that, we expect it to become a spectacle in itself, providing entertainment for participants and spectators alike".

And a spectacle is indeed what it is, for outside, on the front of the centre, six overhead TV screens relay the drivers'-eye views and two action-camera views to comfortably with your Visette on and the adrenaline pumping madly, it's race time! You find yourself looking from the driving seat of a virtual car. It's no ordinary arcade car, though. You can look round in your seat and see the dashboard, complete with dials, and the struts of the doors and windows. Ahead of you can see cars, stretched out on the grid, waiting for the lights on the gantry to change.

Green! They're off! The aim of the

ET YOUR COPY!

....

....

..... EVENING

To the newsagent: New Computer Express is published by Future Publishing and is available from your local wholesaler. Send back all your Future shop save coupons for entry in a free draw to: Kate Hodges, Future Publishing, 30 Monmouth Street, Bath BA1

EDITOR • Andy Storer
NEWS EDITOR • Tim Smith
PRODUCTION EDITOR • Julie Tolley
TECHNICAL EDITOR • Keith Pomfret
ART EDITOR • Amanda Cook
STAFF WRITERS • Dave Golder
• Tim Howell
GAMES REVIEWER • Stuart Campbell

CONTRIBUTORS • Steve Gold
• Jason Holborn • James Leach
• Cliff Ramshaw • Mary Branscombe
• Rod Lawton • Paul Rigby
• Ian Wrigley • Haydn Fitz-Williams
• Andy Hutchinson • Robin Alway
• Andrew Roberts

CIRCULATION DIRECTOR • Sue Hartley
AD MANAGER • Mike Jennings
SENIOR SALE S EXEC • Tim Partridge
AD EXECUTIVES • Charlie Nicholls
• Siobhan Kennedy-Coyne
AD PRODUCTION • Frances Wasem
AD TYPESETTING • Terry Mackereth
PRODUCTION TECHNICIANS
• Simon Windsor • Chris Stocker
• Jerome Clough
PUBLISHER • Steve Carey

ABC audited circulation July-December 1990:20,204 copies per week

We regret we cannot enter into any personal correspondence. Technical enquiries should be addressed to Tech Tips at the address below.
While every care is taken in the preparation of New Computer Express, Future Publishing cannot be held responsible for the consequences of any errors that may occur.

• Subscriptions: The Old Barn, Somerton, Somerset (0458) 74011
• Printed by Redwood Press, Melksham, Wilts
• Distributed in UK and Eire by Future Publishing (0225 442244), rest of world by Comag (0895 444055)
© Future Publishing Ltd 1991
30 Monmouth Street, Bath BA1 2BW

CONTACTS
Tel:0225 442244 Fax: 0225 480325
E-mail: ASPECTS: 061 792 0260
CIX @ astoer
GOLD @ 84:TXT152
PRESTEL @ 01112623

Your guarantee of value

This magazine comes from Future Publishing, a company founded just six years ago, but which now sells more computer magazines than any other publisher in Britain. We offer:

Better advice. Our titles are packed with tips, suggestions and explanatory features, written by the best in the business.

Stronger reviews. We have a cast-iron policy of editorial independence, and our reviews give clear buying recommendations.

Clearer design. You need solid information fast. So our designers highlight key elements by using charts, diagrams, summary boxes, annotated photographs, etc.

More reader interaction. We draw strongly on readers' contributions, resulting in the liveliest letters pages and the best reader tips. Buying one of our magazines is like joining a nationwide user group.

Better value for money. More pages, better quality: magazines you can trust.

Future
PUBLISHING
Home of Britain's finest computer magazines.

New Computer Express
Amiga Format • ST Format • PC Format
Amiga Power • Amiga Shopper
PC Plus • PC Answers • 8000 Plus
Public Domain • Amstrad Action
Sega Power
Commodore Format • Your Sinclair

YOU ARE TARGETED FOR TERMINATION
TERMINATOR 2
JUDGMENT DAY ™
ocean
T2 ™
CBM AMIGA
ATARI ST
SPECTRUM
AMSTRAD
COMMODORE
ljn LTD.

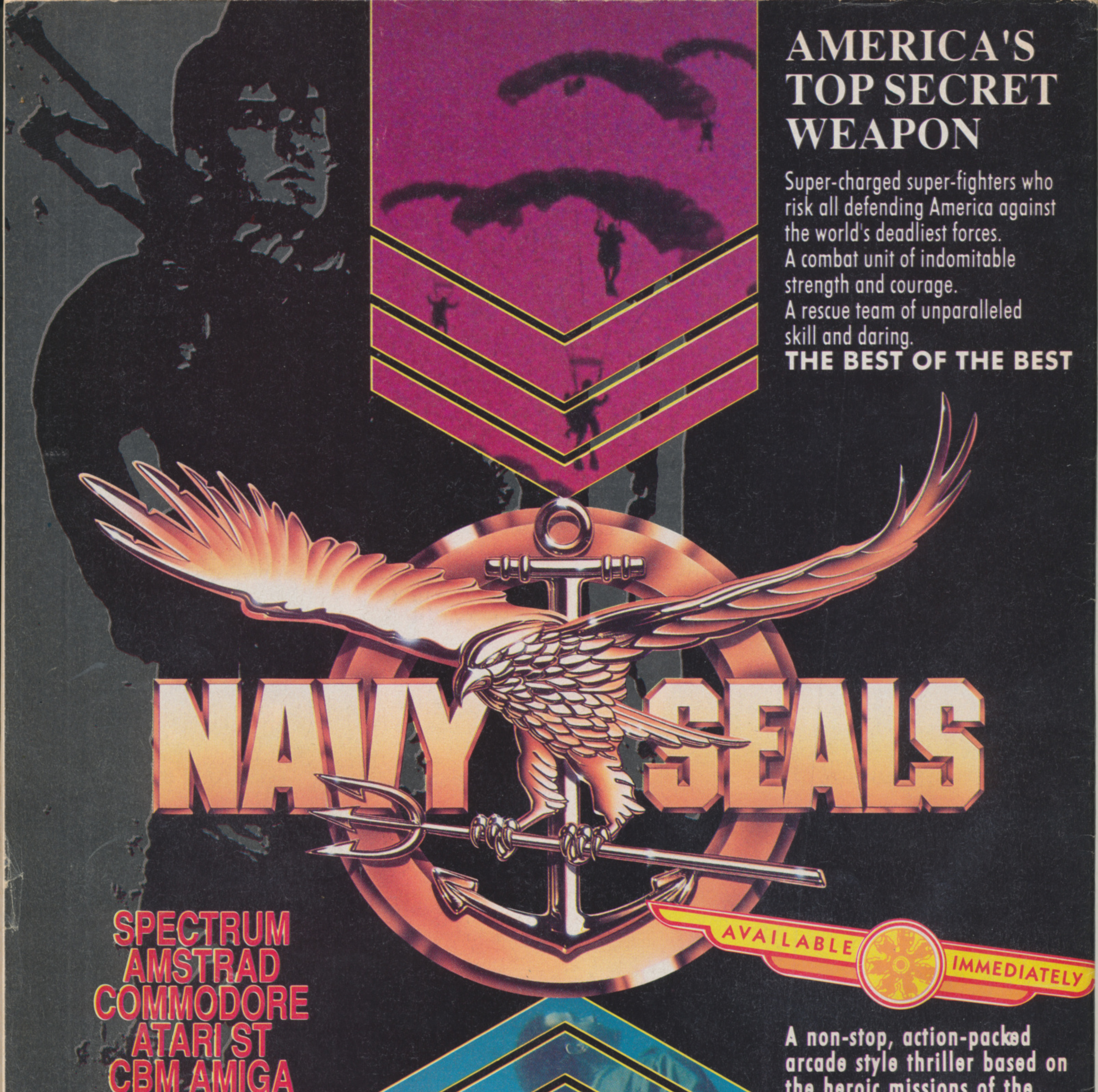
OCEAN SOFTWARE LIMITED
6 CENTRAL STREET · MANCHESTER · M2 5NS
TEL: 061 832 6633
FAX: 061 834 0650

LJN® is a registered trademark of LJN Ltd.
© 1991 LJN. All rights reserved.

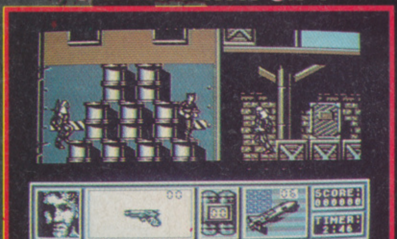
© 1991 Carolco International N.V. All Rights Reserved

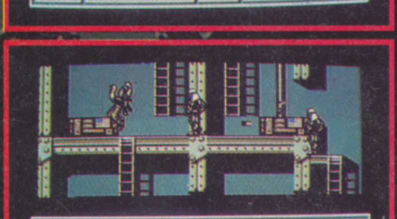
AMERICA'S TOP SECRET WEAPON

Super-charged super-fighters who risk all defending America against the world's deadliest forces.
A combat unit of indomitable strength and courage.
A rescue team of unparalleled skill and daring.
THE BEST OF THE BEST



SPECTRUM
AMSTRAD
COMMODORE
ATARI ST
CBM AMIGA





A non-stop, action-packed arcade style thriller based on the heroic missions of the world's most elite, superbly trained commando unit... the U.S. NAVY SEALS.
You have a number of perilous missions to complete. Out-manoeuver the enemy, destroy hostile missile sites and rescue the hostages.
You begin with the briefing you may end with a victory.. it's the middle ground that hurts!

ocean

OCEAN SOFTWARE LIMITED
6 CENTRAL STREET
MANCHESTER M2 5NS
TEL: 061 832 6633
FAX: 061 834 0650

ORION PICTURES CORP.
© COPYRIGHT 1990